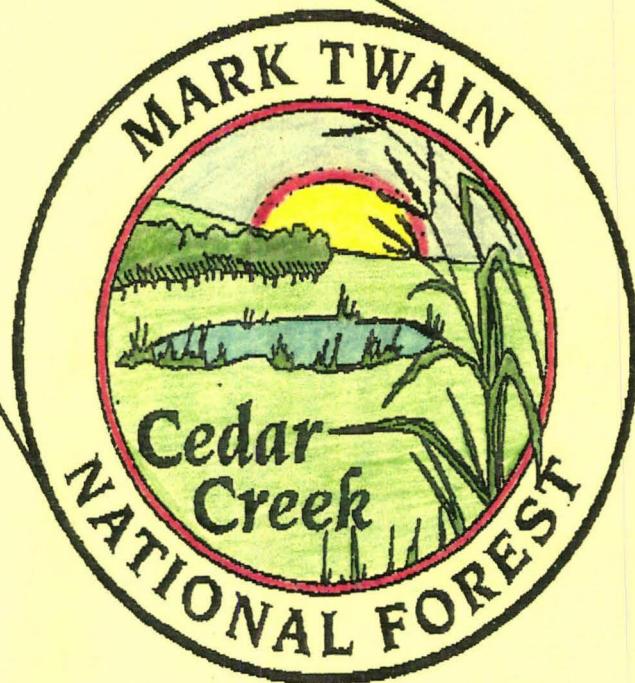


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# CEDAR CREEK RANGER DISTRICT RESPONSE TO RECREATIONAL OPPORTUNITIES AND TRENDS IN CENTRAL MISSOURI



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Mark Twain National Forest  
March, 1993

**CEDAR CREEK DISTRICT  
RESPONSE TO RECREATION  
OPPORTUNITIES AND TRENDS  
IN CENTRAL MISSOURI:**

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It in no way reflects the USDA Forest Service policy nor are  
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## ABSTRACT

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**TITLE:** Cedar Creek District Response to Recreation Opportunities and Trends in Central Missouri

**ABSTRACT:** The Cedar Creek District of the Mark Twain National Forest is located on 15,000 acres in Central Missouri. These lands provide a variety of recreation opportunities to the populations of Boone, Callaway and Cole counties. The purpose of this study: a)to examine activities in which people of the study area are participating, b)how the District should continue to provide for their recreational needs and c)develop a plan responsive to future user trends.

Steps taken to reach this goal included a listing of available recreation resources that best fit the Recreation Opportunity Spectrum, a review of user surveys by state agencies, a look at current demographics and an indepth review of literature in response to use trends and factors contributing to choices for leisure time activities.

The resulting plan covers all aspects of the Districts' recreation program and and effort to coordinate with other agencies to continue to provide quality recreation experiences for the local populations. With this in mind the paper was written for the use by resource personnel, District Rangers, and Recreation Staff Officers. Others who may find it useful include landscape architects, managers in other resource agencies and affected publics.

**KEYWORDS** Recreation Opportunity, Recreation Uses  
Recreation Planning, User Trends.

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## EXECUTIVE SUMMARY

**TITLE:** Cedar Creek District Response to Recreation Opportunities and Trends in Central Missouri.

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**BACK-GROUND:** Located in Central Missouri the lands of the Cedar Creek District have seen changes not only in management by different agencies within the Department of Agriculture but also in the types of wildlife-related and outdoor recreation users. For the purposes of this report Central Missouri is defined as the counties of Boone, Callaway and Cole. The National Forest Service (NFS) manages land in Boone and Callaway counties. Cole was included because it shares the Missouri River border with these counties, part of Jefferson City is located across the river in Callaway, and its proximity to federal lands. In order to provide quality recreation opportunities for the population of central Missouri the NFS faces a number of challenges and conflicts among customers. In these times of change, it is important that resource managers weigh not only the mission of the agency but demands of the user.

**PURPOSE:** As recreation management in the NFS focuses on new and varied way to improve and continue levels of opportunity on Federal lands it is important to look at many factors that effect those who participate in wildlife-related and outdoor recreation. These factors, which will be discussed in this study, include the existing capacity of facilities provided by all vendors, user surveys to identify trends and uses, existing and potential partners, and population demographics.

**In developing a strategy to best serve the local populations and fit into the standards and guidelines of the Land Management Plan (LMP) and Recreation Opportunity Spectrum (ROS) a response must be developed which serves the people but maintains the integrity of the resource.**

CURRENT  
SITUATION:

In order to project the future of a recreation program, it is important to review recreation opportunities provided by other agencies and private vendors. In times of constrained budgets, integration of management and working in partnership with other agencies is the best way to ensure a varied offering of wildlife-related and outdoor recreation facilities.

In the 1990 census, this three-county area had a population of 208,767. Lands administered by State and Federal agencies for wildlife-related and outdoor recreation activities accounted for 36,770 acres, or 0.18 acres per person. The majority of these acres provide for day use activities such as hiking, picnicking, nature study, hunting and fishing. Developed campsites within 30 minutes of the NFS lands are few: Finger Lake State Park has 35, Pine Ridge campground has 7, and private vendors maintain about 125 sites for trailers and tents.

Recent user surveys conducted by the Missouri Department of Conservation (MDC) and Department of Natural Resources (DNR) were used to get an idea how Mid-Missourian recreate and compare with trends statewide and nationally. The most notable difference in Missouri is the continued popularity in wildlife-related activities. Of activities listed in the Missouri SCORP as very popular or popular and on the increase, 5 of 7 are found on NFS lands. A popular activity not on the increase is fishing. There are a number of countercultural developments that might be viewed as negatives when evaluating wildlife-related recreation. To offset these, the District must continue to monitor programs and services through social research to determine its future emphasis.

Among the factors that affect a person' recreation choices are age, gender, income, education, occupation and race. The population represented in Mid-Missouri has stable employment, higher incomes, more education, increasing population and is more urban than those on other Districts of the Mark Twain National Forest. The population is mostly white, less than 10% of ethnic groups are represented. There is a 50% split by gender, and median age of 32.6 in Callaway, 32.8 in Cole and 27.7 in Boone.

The development of partnerships on the District has allowed for improvements of recreation sites and development of new facilities. The future management of NFS lands is very dependent upon Challenge Cost Share and Volunteer agreements.

The NFS and MDC have a long history of cooperation, this tradition will continue as we improve customer service and visitor experience on our respective lands.

Every county in the area has a Tourism Commission: providing a chance for the NFS to interact with the local community and allowing for an exchange of knowledge, skills and abilities.

#### DISCUSSION AND RECOMMENDATIONS:

This paper is the first step of many to complete the recreation management strategy on the Cedar Creek District. More information is needed including a review of the facility capacity levels, results from a vehicle license survey conducted last summer, visitor counts to be taken from June through October, cost estimates for improvements and developments, and continued scoping for public input.

Cedar Creek can serve as a gateway to the entire Mark Twain. It is an excellent area for individuals to experience the NFS for the first time. National Forest lands must retain their identity as moves are made to integrate services with other agencies and management by volunteer groups increase. If we expect quality partners, we must be a quality partner.

## 1. INTRODUCTION

The Cedar Creek Ranger District of the Mark Twain National Forest (MTNF) is located in Central Missouri, just north of the Missouri River where the Ozark region meets the remnants of the tall-grass prairie. The climate of the region is characterized as temperate and humid. The weather pattern lends itself to long recreation seasons with heavy use in the spring and fall, but consistent throughout the year.

Located within a triangle formed by three major highways, (Interstate 70, U.S. Highway 63 and U.S. Highway 54) and three cities (Columbia, Fulton and Jefferson City) the District provides Boone, Callaway and Cole county residents easy access to the recreation opportunities on National Forest lands.

The history of the Cedar Creek differs significantly from most other units in both the MTNF and the Eastern Region. The majority of land was acquired under the Bankhead-Jones Farm Tenant Act of 1937 by the Soil Conservation Service (SCS). From 1939 until 1953, the SCS managed the area under a program of land conservation and utilization to improve the heavily eroded farmlands. In 1953, the Department of Agriculture reorganized and these lands, now totaling 12,944 acres, were transferred to the National Forest Service (NFS) for administration and management under the concept of multiple-use. It wasn't until 1972 that the area was designated as a Purchase Unit of the National Forest System. Twenty years later in October of 1992, President George Bush signed H.R. 6014 "to designate certain land in the State of Missouri ... as part of the Mark Twain National Forest". At that time the District managed 15,200 acres.

The landtypes managed by the District reflect those of the surrounding landowners which are 60-70% agricultural. One-third of the lands are managed for restoration to native prairie species through the use of grazing. Another third is managed for semi-open land and the remaining third is in timber. Parcels of NFS lands in these acreages blend in visually with those of private landowners. However, this does present trespass challenges. The small timber base reduces the management priority of this resource, lending uniqueness in comparison to other NFS units.

This paper will address how the NFS can continue to provide quality wildlife-related and outdoor recreation opportunities for the populations of Mid-Missouri. In the 1990 census, this three-county area had a population of 208,767. State and Federal lands account for 36,770 acres, or 0.18 acres per person available for outdoor experiences in rural to semi-primitive settings.

## 2. STATEMENT OF PURPOSE

### 2.1 PROBLEM STATEMENT

The District has maintained high recreation use and visitor loyalty despite the lack of road and trail maintenance, poor boundary signing, lack of full-time recreation personnel, dependence on Cooperative Law Enforcement to provide for visitor safety and regulation compliance, a growing urban-rural interface, distance from other NFS Districts, and the difference in the management of the Lands acquired during the 1930s.

In 1991 at a Conference for Mark Twain Recreation personnel one speaker pointed out the socio-economic differences between the Cedar Creek District and the rest of the Forest. These included higher education levels, more stable employment, higher income, increasing population, and a more urban society.

An opportunity exists to discover how much use the District can accommodate with a limited landbase and increased levels of visitation. Since acquisition of land is an obstacle, partnerships with other agencies and development of private land become options for consideration.

What are the most popular activities on the Cedar Creek District? Do they present specific management problems? The answer to both of these questions begin to be answered below.

The first outdoor recreation activity is the trail system developed in the 1970s by local boy scout troops presents its own set of challenges. The original 21 mile loop was never designed for the present use levels or types of users. Conflicts arise as a result of horseback riders venturing onto sections of trail reserved for hikers and mountain cyclists. This situation is compounded by the lack of erosion control and surface hardening on the trail tread.

Another wildlife-related recreation activity which poses a serious threat to visitor safety is the number of hunters in the area during the fall firearms season for deer and the spring turkey season. Last spring three users received gunshot wounds in Callaway county alone. One, a mushroom picker, was on private land but "thought he was on NFS property" the same as the hunter who shot him. The second incident occurred at the Reform wildlife area managed by Missouri Department of Conservation (MDC). The last day of the season, a hunter shot at a "turkey" but hit two hunters. During both seasons, the office receives a number of complaints concerning trespass, shots fired near homes and peace disturbances.

## 2.2 PROJECT OBJECTIVES

Where does the Forest Service fit in the recreation business in Central Missouri? To answer this a review of the following information should be completed and recommendations presented.

1. Identify existing recreation facilities and opportunities in the tri-county area.
2. Review user surveys and identify uses.
3. Develop a recreation plan that outlines services and opportunities best provided by the Cedar Creek District.
4. Examine opportunities for multi-agency, private enterprise, and partnerships in the management of recreation opportunities on the District.

A quick review of the Mark Twain Land Management Plan (LMP) and Recreation Opportunity Spectrum (ROS) guidelines, finds that wildlife is the emphasized management for the District with wildlife-related recreation opportunities falling in the spectrum from semi-primitive non motorized to rural. Does this fit? The management emphasis works well for Cedar Creek but non motorized? Closure of a number of county roads within the NFS boundary has been initiated with mixed results. In order to provide a non motorized experience more roads must be closed. Can we ever achieve the Desired Future Conditions of roaded natural in Management Areas 3.4 when grazing is utilized in the restoration of the native prairie? Isn't the rural spectrum more suitable? With a small landbase it is hard to be "all things to all people". Should we try? We do! Of course to many urban people this is the "wilderness"!

Ecosystem management is the approach chosen to achieve desired future conditions of the LMP. Which aim of ecosystem management best fits recreation? "Within the sustainable capacity of the land, meet the needs of people who depend on natural resources for food, fuel, shelter, livelihood and spiritual experiences" or is it "... improve the well-being of communities, regions, and the nation through diverse, cost-effective, and environmentally sensitive production, use and conservation of natural resources" (USDA 1993) or both.

This study will lay the groundwork on which to continue. It has given the District an opportunity to measure how much it has accomplished since its inception and plans developed in the 1970s for the future of wildlife-related and outdoor recreation opportunities. It has looked at the planning decade of the 1980s, standards and guides developed for future management. The Forest made a decision to continue the LMP developed in the 80s with some modifications during the next planning period.

All of us on the District realize our impacts are felt beyond this three-county area and as we make plans for the future, the needs of visitors from the rest of the state must also be considered.

### 3. RESEARCH METHODS

I've never been lost, but I was once disoriented for two weeks."

Daniel Boone

Soon after my return from Clemson University, research uncovered information related to the recreation opportunities in the area and what had been planned since the inception of the Cedar Creek Purchase Unit. In the District Library and files were found copies of the Final Environmental Impact Statement (1975), the Plan for Managing the Cedar Creek Purchase Unit (1975), the Mark Twain National Forest Recreation Plan (1974) and the Mid-Missouri Overall Economic Development Program (1977). These documents were used as a basis to begin an analysis of the recreation opportunities on the Cedar Creek Ranger District.

I located a number of documents compiled at all levels of the organization which were helpful in providing background information pertinent to recreation opportunities managed on Forest Service lands. These included but were not limited to the Mark Twain LMP (Appendix A), and ROS (Appendix B).

The next step was to conduct a literature search utilizing the INFLEX database at the Daniel Boone Regional library which is located in the area covered by this report. A variety of publications and books was available through this source.

I then contacted FSINFO Centrals' database to conduct a literature search using the keywords "recreation opportunity", "recreation uses", "recreation planning", "user trends" and "regional recreation plans". Over one hundred citations were found. Selected topics of this listing were obtained at Ellis Library located on the campus of the University of Missouri in Columbia.

The counties included in this study recently evaluated recreation opportunities as they relate to rural development and tourism. All three were contacted, as well as Jefferson City, Columbia, Fulton and the University of Missouri Research Department to obtain their results. Data was available from Callaway County and the city of Columbia.

A source that provided statistics from the Columbia area was the MDC planning division, with results of their surveys conducted in the last five years. Other information obtained from this source included the 1991 National Survey of Fishing, Hunting and Wildlife-Associated Recreation conducted by the National Fish and Wildlife Service.

With the help of the Forest Recreation Planner, copies of the Missouri State Comprehensive Outdoor Recreation Plan (SCORP) 1991-1996 and the Missouri Public Areas Recreation Visitors Survey (PARVS) 1988 reports and summaries were added to the ever growing pile of reference materials.

## 4. CURRENT SITUATION

In order to best plan for the future of the Recreation program on the Cedar Creek District, it is imperative to review recreation opportunities provided by a variety of state, local and private entities. To integrate management and work in partnership with other agencies is the best way to ensure a variety of outdoor recreation facilities and to provide cost-effective management. As budgets are constrained, any areas where there are opportunities to find creative ways to finance new development, rehabilitation, operation and maintenance of facilities should be explored. This chapter will identify the existing opportunities and facilities, review user surveys, local demographics and trends affecting recreation participation.

### 4.1 Recreation Opportunity

NFS managers are experiencing rapid growth in the interface between urban-rural ownership, as more people move from the cities to live next to public lands. This makes acquisition of lands for the Cedar Creek unit difficult. It constrains the development of recreation facilities and location of the trail system due to large gaps in federal ownership. In comparison of recreation facilities I will concentrate on those that fit ROS guide from rural to semi-primitive non motorized management.

Reviewing management of recreation opportunities in the study area the State of Missouri manages the largest number of acres with 21,500 under the administration of three separate agencies: Missouri Department of Natural Resources (DNR) - State Parks and Trails Division, Missouri Department of Conservation (MDC) and Missouri Highway and Transportation Department (MHTD). The NFS comes in second with 15,270 acres and private vendors total about 250 acres. The majority of all areas provide fishing access, with hunting a close second. Eight-hundred acres of MDC land offers nature study only. A location map is found in Appendix E, along with a map of the Cedar Creek District.

Three State Parks are located in the study area: the Katy Trail, a rail to trail system, located in the abandoned M-K-T right-of-way. The only services provided are 3 picnic tables and a portable toilet at each of three trailheads along the 30 mile trail in Boone and Callaway counties. An additional 23 miles will be completed in Callaway County by summer of 1993. This trail allows hiking, mountain biking and wheelchaining. Of the two others, both located in Boone county, only Finger Lakes is developed for overnight camping with 35 sites. Rock Bridge the third has historical and geological significance and is developed for day users and permits group camping only.

Most of the land under the management of MDC concentrates on day use activities such as hiking, sightseeing, picnicking, nature study, hunting, fishing, and trapping. Primitive, undeveloped camping is allowed in the three areas.

The majority of developed campgrounds in the area are provided by private vendors. Two of the campgrounds are located in Cole on the Osage river over 30 minutes from NFS lands. The third is located in Callaway just south of Interstate 70, three miles northeast of the District and about 20 minutes from its nearest developed area.

## 4.2 Recreation Use Trends

"The essence of this different environment for recreation - and for crafting new policies for recreation - can be characterized in six words. These words are: change, time, distance and close to home." George H. Siehl 1990

"Missouri has very limited participation statistics on which to establish a trend, therefore, must rely on national data"(SCORP 1991). This report will meld the national trends as described by Siehl and emerging trends in Central Missouri utilizing data from the 1990 SCORP and MDC "Seven-City Survey".

Recreation trends do not differ significantly in Missouri from the rest of the country. The exception is the majority of urban residents have roots in rural Missouri. In Columbia, 63% of the population surveyed grew up in a rural area or small town compared with 38% of the urban residents statewide. This statistic helps to explain why so many area residents continue to hunt, fish and enjoy the outdoors. It is likely that their participation will continue or increase while the rest of the country may note decreases in many wildlife-related recreation activities. In fact, the trend in central Missouri is to move out of the city into the rural areas and small towns in both Boone and Callaway counties. In the Columbia area alone 39% of the respondents live in rural areas compared to 8% statewide.

Central Missourians follow national trends closely in regards to time and distance traveled to enjoy outdoor recreation activities. This is supported in information from both the SCORP and MDC surveys and excerpts from these reports are found in the following paragraphs. "The average Missouri adult spends 5.7 hour per week in outdoor recreation activities, but one out of every eight adults does not have time for outdoor recreation activities"(SCORP 1991).

"Thirty-seven percent normally recreate within half an hour's distance from home while nineteen percent may travel up to sixty minutes. Only fourteen percent spend more than one hour to travel to a recreation spot most of the time"(SCORP 1991).

"A typical Missourian makes thirteen outdoor trips a year. Of those who indicated they had taken an outdoor vacation in 1989, nearly one-quarter took all the vacation time at once, thirty-one percent took one week at a time, and thirty-five percent from two to four days at a time. The average Missourian takes a pleasure trip on one of every ten weekends of the year"(SCORP 1991).

Of activities listed as very popular or popular and on the increase, 5 of the 7 are provided on NFS lands in Central Missouri: walking for pleasure, picnicking, bicycling, hiking and camping. One popular activity not on the increase statewide is fishing. Specialized activities not on the increase are horseback riding and hunting. These activities remain popular in central Missouri. Horseback riding is a much requested activity on the Cedar Creek District, due to a lack of trails on other public lands.

"There are a number of countercultural developments which will effect how we continue to manage lands for recreation uses. Counterculture includes any movement, condition, or trend that could weaken the traditional Western concept of natural resource management - wise use of fish and wildlife by humans (Witter 1991).

As stated in the LMP wildlife management is emphasized on the District. As a result a number of these countercultural movements might be construed as negative trends effecting public support in continued management for wildlife related recreation. These include Animal Rights; Preservation vs Conservation; Isolation based upon Place, Social Underprivilege/Unrest, Time; and the New Age Movement including the Greens, a third party active in the Columbia area. " In response to these developments the agency must work to incorporate todays folkways as well as tomorrow's innovations, diversify the product they offer to users, cultivate new Clientes and Cooperators, provide exemplary service and finally detail their goals and objectives for resource management in formal strategic and operational plans open to inspection by the public. Moreover, successful agencies will be those that monitor their programs and services through ongoing social research to determine if the program should remain untouched, fine-tuned, subjected to major overhaul or scrapped" (Witter 1991).

#### **4.3 Social and Demographic Factors**

Among the factors that affect a person's recreation choices are gender, age, race, education, occupation and income. A brief overview of the population in Mid-Missouri as it compares to the rest of the State is of important when planning for types of recreation opportunities to provide. All of the data from the 1990 census is not published. In the discussion, the latest available figures will be used either from 1990, 1986 or 1980 census data.

In 1977, the Mid-Missouri Economic Development District projected population growth for the area containing the counties included in this study. How accurate were they?

| County   | Year | Projected | Actual  | Year | Projected | Actual  |
|----------|------|-----------|---------|------|-----------|---------|
| Boone    | 1980 | 94,500    | 100,376 | 1990 | 108,600   | 112,379 |
| Callaway |      | 29,837    | 32,252  |      | 33,600    | 32,809  |
| Cole     |      | 54,300    | 56,663  |      | 63,900    | 63,579  |
| Totals   |      | 178,637   | 189,291 |      | 206,100   | 208,767 |

Even though the distribution is heavier in Boone the overall prediction falls a little short. From 1980 to 1990 census the rate of growth for Boone was 12%, Callaway 1.7% and Cole 12.2%, statewide growth was only 4.1%, which indicates that these areas will continue to grow in size. The 1991 census numbers show that Boone continues to grow and grew faster than any other Standard Metropolitan Statistical Area(SMSA) in the State.

The gender split in Callaway is 50%, but the other two counties are just off center - Cole is 51% male and Boone is 52% female. Median age as stated in the 1990 census reports falls just below the Statewide age of 33.5 years in Callaway 32.6 and Cole 32.8, Boone is significantly lower at 27.7 years. This difference is a result of the three colleges located in the county, the largest being the University of Missouri.

A summary of races expressed in percent:

| County   | White | Black | Hispanic<br>Origin | Native American<br>Eskimo/Aluet | Asian/Pacific<br>Islander | Other |
|----------|-------|-------|--------------------|---------------------------------|---------------------------|-------|
| Boone    | 88    | 7     | 1                  | <1                              | 3                         | <1    |
| Callaway | 94    | 5     | <1                 | <1                              | <1                        | <1    |
| Cole     | 91    | 8     | <1                 | <1                              | <1                        | <1    |

The illiteracy rate of adults over 25 years of age 10.9% in Callaway county which matches the statewide average, while Boone is 4.7% and Cole is 8.5%. Over 50% of all residents have continued their education past high school.

Employment in the area is very stable. The majority of employment is in the service sector and government agencies. Income levels for the majority of resident are over \$30,000 per year. Of the three Callaway has the largest percentage in farming at 11% and manufacturing at 13.7, both have grown from 1980 to 1986. Cole has the lowest percentage of commuters at eight, an increase since 1970. The other two counties have 30% of their workers who commute with Boone showing a 22% jump from 1970-1980. Percentage of women with children under six who work is over 50% in all three counties.

Because of its location Cedar Creek is utilized by many young people and youth groups (e.g. the Boy Scouts of America), groups of college students and local day care centers. These young people continue to hike, camp and enjoy the outdoors. Many times they return with their families and continue to use the area as adults.

As these groups age, we must examine our facilities and work to provide a continuing recreation opportunity. In a paper on this subject, Bruce Hronek, describes the Cedar Creek recreation experience. "Bigness may not be a particularly desirable trait... most of the campers are from urban areas and are used to the sounds of others around them... campgrounds open outside of the traditional season [full service in spring and fall]... a variety of [forest products] gathering activities... gifts and remembrances. Other factor are access to major highways, barrier free designs, sites to accommodate RVs, volunteer opportunities, and short loop trails. All of which would be easy to provide on the district.

#### **4.4 Partnerships**

"Partnerships will be the preferred way by which we provide better customer service and expand the recreational opportunities on the National Forests"

America's Great Outdoors

The National Recreation Strategy outlined by the Forest Service in 1988 is a far-sighted and outward reaching mission. The development of partnerships on the Cedar Creek District has allowed for expansion of the trail system, development of accessible fishing, plans for a wrangler camp, improvement at the existing campground, research of coal mining operations at Carrington Pits, in addition to wildlife and fisheries habitat work.

The future management of recreation on the District is very dependent upon the Challenge Cost Share program and Adopt-a-Trail volunteer agreements. Not only has this program improved facilities but the Trails Coalition united users from diverse backgrounds and interests into a common goal of trail expansion and improvement. Conflicts between trail users have not completely disappeared but many have been resolved. The limited land base of the District makes the development of separate trail systems impossible if all are to experience the diversity of the area.

Though many outdoor interests are represented in these partnerships, there are still opportunities to include even more diverse groups of people. One untapped group consists of urban blacks. Although their numbers are small in Mid-Missouri, they should increase in the future. MDC works actively in urban areas to provide nature centers, outdoor experiences in secure setting and social interactions for black populations with programs such as Eagle Days, Day on the River and many others. A phenomenon discussed at Clemson University's 1992 Outdoor Recreation Management course relates to numbers of minority groups who are picnicking. Reminiscent of the 50's and white populations, if their experience is positive the progression to more rural settings and activities will follow.

The Forest Service and MDC have a long history of cooperation not only in fire suppression, but also land management planning, information exchange, personnel details, and agency interaction in many facets of administration and management. This tradition should continue as we improve customer service and visitor experience on our respective lands. In the past month, planning began for an "interpretive bus tour" of Central Missouri. A copy of the Districts' Interpretation Plan was provided to the MDC coordinator for the project.

Every county in the area has a Tourism Commission: providing a chance for the NFS to interact with the local community and allowing for an exchange of knowledge, skills and abilities. The District Forester is a member of the Callaway Tourism Board. The Cedar Creek District has been under-utilized in regard to the visitors and dollars brought to the area. Not only for that but the value of the recreation facilities it provides the county.

## 5. DISCUSSION AND RECOMMENDATIONS

If bread is the first necessity of life, RECREATION is a close second.

Edward Bellamy

### 5.1 Discussion

Since January 20, when President Clinton took the oath of office, change has been the word of the day. How will the change in administration and re-inventing of government agencies effect recreation programs at the District level? It may be years before we feel the effects of change or as early as the summer of '93. One thing is for certain - there will be change. So an attempt to balance present policy, the unknown but much discussed future, and what our customers say, is uppermost in the recreation program managers' mind.

Here in central Missouri, the Cedar Creek District has the opportunity to join with a number of other agencies and groups in providing a diversity of wildlife-related and outdoor recreation opportunities. The challenge is to take information based upon past experience and future expectations to arrive at a response that utilizes accepted guidelines with future trends and unknown realities.

This is just the first step in recreation management on the Cedar Creek District. Although all aspects of a strategy have not been completed, a good foundation is in place. A flexible plan will be important for the District since land acquisition is met with variety of challenges, of which cost plays an important role. The Fiscal Year 1993 Land Acquisition Plan is found in Appendix F, the most important parcel to the recreation program also has the highest District priority.

The numbers of people served by public lands in the study area shows a need to continue to provide and even increase opportunity for wildlife-related and outdoor recreation. The pressure from local residents and the ever-increasing inquiries from the St. Louis and Kansas City areas show a continued use pattern of the already short supply of facilities.

User surveys conducted by both MDC and DNR, which were discussed in Chapter 4, show that recreation trends in Mid-Missouri are similar to those throughout the country with a few exceptions. The capacity for recreation users is limited at this time. Only MDC is actively purchasing land for public use, though this land is limited in its recreation opportunities.

This past spring, a team of Forest recreation managers completed a survey of developed recreation facilities on the each District. Using the measure of capacity, Person at one Time (PAOT), it was applied consistently throughout the Forest. These figures will be used in the budget process with a factor to distinguish between areas which cost

more to maintain. Capacity on Cedar Creek totaled just over 500 PAOTs. Broken down as follows: parking spots 79%, picnicking 12%, and camping 9% (which will increase with the completion of Dry Fork campground). In relation to the rest of the Forest the District ranks last in total capacity, as well as camping and picnicking but sixth out of nine in parking spots. A comparison of local population may find that an increased capacity might not be that far-fetched.

Last summer a vehicle license survey was conducted, for the most part on weekdays, the results were not surprising. The majority of users come from the three counties covered in this study at 70%, of those outside of central Missouri 14% from the greater St. Louis area and 7% from the Kansas City area. Two other Districts on the Forest participated in this survey. One located in southeast Missouri had similar results with the majority of users from the local area and then visitors from the St. Louis area. The third located in southwest Missouri differed in that an almost equal representation from the local area and then Kansas City the closest metropolitan area. The Cedar Creek District could draw in more users from outside the local area, due to its proximity to Interstate 70.

One of the most important parts of this plan is our users are brought into the decision process, not only to comply with the National Environmental Policy Act but to ensure their support and help in not only developing facilities but in the maintenance of them. During Step 2 analysis of the LMP, the majority of comments were related to the Districts' wildlife-related and outdoor recreation opportunities. This input has been echoed throughout the planning process. A number of project plans resulted from the Step 2 analysis and the resulting list is found in Appendix G.

## **5.2 Recommendations**

### **5.21 Recreation Role**

The Cedar Creek Ranger District has the opportunity to provide a variety of ecosystems where people can recreate. Its location in the Central part of the state gives it access to the majority of the population of Missouri, but its land base is too small to accommodate great numbers of use. It is important for the Forest Service to continue to provide its signature type of recreation opportunities which compliment and supplement those under the management of state and private groups.

Since the land base is not likely to increase significantly it would be beneficial to all for the District managers to explore the possibility of unique partnerships. One example would be to work with MDC, county governments and local landowners to provide developed access along Cedar Creek. Though the floating season is dependant on spring rain run-off, it is popular for fishing and one of the few water sources on the District.

The type of developed recreation provided on the District fits in well with that provided by others. There are needs of some user groups such as horseback riders for camp-

grounds and areas for endurance rides that are presently not available. This presents a chance for the Forest Service to develop these areas while leaving management of off-road vehicles to DNR at Finger Lakes State Park.

At this time, the FS fills gaps in recreation opportunities not filled by MDC or DNR. Though at times facilities may be similar for example dispersed camping throughout Federal lands and MDC allowing camping at its undeveloped areas, the need is great and ever-increasing. The largest trail system in the area is the highly developed Katy Trail which is open to hikers and bicycles only. The trail system at Cedar Creek falls in a lower development level and is open to horseback riders as well. Even if the District were to acquire land and develop a campground in Boone county it would only help to alleviate the pressure on present facilities in all three counties.

The Cedar Creek district should continue its present recreation program but also monitor it for areas for improvement or closure as user demands change. Its history shows that this has been the case, with one picnic area just outside of Fulton was obliterated and other facilities identified for development and improvement. Present facility plans were made with user demands in the forefront; the concept of "if you build it, they will come" is not an issue. They are coming. Which facilities are improved is dependent upon funding and landbase. The challenge will be to provide a "quality" experience for the user and to understand that all expectations will not be met. Flush toilets and showers are a long way down the road, if ever possible.

## 5.22 Popular Recreation Activities

The most popular activities on the District are use of the Cedar Creek trail system and hunting. The number of parking spots scattered throughout the District are evidence of these users. Not only do they provide parking during hunting season but with only one trailhead and 35 miles of trail they are easy access points for users of the trail throughout the year.

In fact, the development of parking areas mirrors the multiple use concept of the Forest Service. These areas are not only used by recreationists, but also grazing permittees, hunters, anglers, and firewood cutters.

Wildlife-related recreation on the District takes the form of not only hunting and wildlife viewing, but also fishing. Many of the farm ponds and creeks of the area support fish. Small impoundments are popular with area anglers. Through the fencing of ponds in grazing allotments and use of water tanks it is possible to serve both the needs of the livestock and recreationist.

The trail system itself is in need of major reconstruction if it is to remain open to users. It was never designed for extensive use and is not properly located in many areas. It is an example of early partnerships and lack of adequate FS personnel. The Boy Scouts went out and put in a trail. Then few could image the impact that trail would have on the

area or the amount of use it would receive. As trends shifted from hiking to mountain biking the trail needs changed and a specific plan of action for reconstruction and maintenance is not a necessity.

In addition, the increase in population of the area also increased the need for campgrounds. The State Park system has only one in the area and sends its overflow to the Forest Service. Our present campground works on a first come, first served basis and is often filled. It is popular with scout troops and is soon filled to capacity with its six sites. Often the picnic area is taken over by campers. Another loop would help alleviate these problems and provide additional parking for the many day users of the trail system. Even though the area was reconstructed to accommodate people with disabilities many of those measures fell short or have not been properly maintained. With the passage of the American with Disabilities Act this area needs to be rehabilitated to better serve the public. With very little improvement the majority of picnic and campsites could become accessible.

The addition of the Dry Fork campground and trailhead will give those horseback riders who have been camping throughout the District a place to stay. It will help the FS to better manage the trail and its SPNM area where many have been camping. Located off a county road it will also lend itself to a more natural setting than Pine Ridge located on a major state route.

#### 5.23 Desired Future Condition

In the LMP, the Desired Future Condition for management area 3.4 which cover the majority of the District states the following: "Apply Roaded Natural ROS class objectives to this area" (Appendix A). In many ways the District recreation fits into this ROS class. One deviation is that the activity of man, with so much private land interspersed with FS it is hard to get away from the evidence of man's activities be it vehicles or airplanes or voices. Another factor is the emphasis on grazing to convert from fescue to native prairie ecosystems. The grazing season runs from mid-April to mid-September which coincides with the peak recreation season.

Another conflict is with "about equal opportunity to experience affiliation to other user groups." Many users are disappointed when they meet others on the trail. However, use is so high, this cannot be avoided. Particular concerns surface during fall and spring hunting seasons, hunters meeting up with hikers or other forest users.

It is a thin line between Roaded Natural and Rural but one that makes a lot of difference in management. No area on the Mark Twain is managed in the Rural class. One option might be to explore the Roaded Modified class that has been used in some western states and make a modification to the LMP for the Cedar Creek District. No matter how we try to manage the most important factor is the visitors' expectations.

One management area on the District falls in the Semi-primitive non-motorized class. At this time all roads have been vacated by Callaway County through this area. The non motorized class can be achieved through enforcement of regulations. But once again the number of users and the size of the area make it difficult to have a semi-primitive experience, in fact it is the **MOST** popular area on the District.

One solution could be a reservation system for the trail, the major drawback is that there are numerous access points that would have to be monitored. Not only those managed by the FS but also access from private landowners. With such broken ownership it would be nearly impossible (Appendix E). Another might be to have only guide services on the trail system.

### **5.3 Conclusions**

Cedar Creek can serve as a gateway to the entire Mark Twain National Forest. It is an excellent area for individuals to experience the NFS for the first time, since it is located in an SMSA and is within two hours of the largest urban areas in Missouri. A commitment to a quality experience will equate to more users on other units and for the survival of facilities on the District. MDC will continue to reach out to urban dwellers and the NFS will find itself providing the wildlife-related and outdoor recreation opportunities for these groups. The biggest challenge will be visitor security.

The National Forest lands must retain their identity. What draws people to Cedar Creek is its National Forest Status. The trail system was constructed by volunteer groups and is the outdoor recreation draw for the District. We will need to utilize volunteers in new ways more closely related to those traditionally held by employees. In order to do that the NFS must "make good" on its commitments. If we **expect** quality partners, we **must** be a quality partner.

## BIBLIOGRAPHY

Callaway County "Tourism Action Plan 1993." Executive Summary Edition. Callaway County Tourism Board. Fulton, MO.

Clements, John. "Flying the Colors: Missouri Facts" 1991. Clements Research Inc. Dallas, TX.

**Comprehensive Master Plan: Boone County, Missouri.** 1973. Columbia, MO.

**Contemporary Issues in Outdoor Recreation.** Technical Papers from the 1988 and 1989 SAF Conventions. Compiled and Edited by Sheila Hubbard Mou. Center for Recreation Resources Policy, George Mason University. Fairfax, VA.

Cordell, H, Ken and John C. Hendee. 1982. "Renewable Resources Recreation in the United States: Supply, Demand, and Critical Policy Issues" Prepared for the National Conference on Renewable Resources and Revised for publication by the American Forestry Association. 1319 18th St., NW, Washington, DC.

Dwyer, John F. 1992. "Customer Diversity and the Future Demand for Outdoor Recreation Experiences." USDA Forest Service. North Central Forest Experiment Station. Chicago, IL.

Garreau, Joel. "The Nine Nations of North America" 1981. Houghton Mifflin Company, Boston, MA.

Heberlein, Tom. "National Hunting, Fishing and Wildlife-Associated Recreation Review." **Progressive Farmer** (December 1992). University of Wisconsin. Madison, WI.

House Resolution 6014. 1992. 102 Congress of the United States of America. Second Session. Washington, DC. \*\*\*

Hronek, Bruce. Undated. "Responding to an Aging Population in National Forest Recreation" Indiana University, Dept. of Recreation and Parks Administration, Bloomington, IN. \*\*\*

McLean, Daniel D., and Ruth V. Russell. 1992. "Future Visions for Public Parks and Recreation Agencies." **Journal of Park and Recreation Administration** (Spring): 46-61.

## BIBLIOGRAPHY (Con'd)

**Mark Twain National Forest. Land and Resource Management Plan.** U.S. Department of Agriculture: Forest Service Eastern Region. Rolla, MO. \*\*\*

**Mid-Missouri Economic Development District.** 1977. Mid-Missouri Council of Governments. "Overall Economic Development Program." Jefferson City, MO. \*\*\*

**Missouri 1985-86 Public Area Recreation Visitor Survey.** 1989. Outdoor Recreation assistance Program, Division of Parks, Recreation and Historic Preservation, Missouri Department of Natural Resources. Jefferson City, MO. \*\*\*

**Missouri Statewide Comprehensive Outdoor Recreation Plan,** 1991. "Missouri Outdoor Recreation Volume 2: Special Studies" Missouri Department of Natural Resources, Jefferson City, MO. \*\*\*

**Outdoor Recreation Benchmark 1988: Proceedings of the National Recreation Forum.** Southeastern Forest Experiment Station. Asheville, NC.

Pinkerton, James R., Rex R. Campbell, and Robert L. McNamara. 1981. "Social Assessment for Mark Twain National Forest". Prepared for USDA Forest Service, Mark Twain National Forest. Department of Rural Sociology, University of Missouri-Columbia. Columbia, MO.

**Recreation and Parks Master Plan: City of Columbia.** 1965-1985. Columbia, MO.

Shands, William D. and Healy, Robert G. 1977. "The Lands Nobody Wanted, A Conservation Federation Report", Conservation Federation, 1717 Massachusetts Avenue, Washington, D.C.

Siehl, George H. 1990. "Trends in Natural Resource Policy Affecting Outdoor Recreation" Environment and Natural Resources, Policy Division Library of Congress, Congressional Research Service, Washington, DC. \*\*\*

**U.S. Bureau of the Census.** 1990. **Summary Population and Housing Characteristics: Missouri.** Washington, DC. \*\*\*

**U.S. Bureau of the Census.** 1980. **General Housing Characteristics: Missouri.** Washington, DC.

**U.S. Department of Agriculture.** "America's Great Outdoors - National Recreation Strategy." Forest Service. 1988 Washington, DC. \*\*\*

## BIBLIOGRAPHY (Con'd)

U.S. Department of Agriculture. "Eastern Region Recreation Strategy: A Guide for Action" Forest Service, Eastern Region. 1988. Milwaukee, WI.

U.S. Department of Agriculture. "Ecosystem Management - Definition of Principles." Director of Ecosystem Management. Forest Service, Washington Office. 1993 Washington, DC. \*\*\*

U.S. Department of Agriculture. "Forest Recreation Plan - National Forests in Missouri." Recreation Planning, Eastern Region. 1974. Milwaukee, WI.

U.S. Department of Agriculture. "Final Environmental Impact Statement: Proposed Management Direction for the Cedar Creek Purchase Unit of the Clark National Forest - National Forests in Missouri". Eastern Region of the U.S. Forest Service. 1975. Milwaukee, WI.

U.S. Department of Agriculture. "Plan for Managing the Cedar Creek Purchase Unit". Clark National Forest, National Forest of Missouri. Eastern Region of the U.S. Forest Service. 1975 Milwaukee, WI.

U.S. Department of Agriculture. ROS Book. Forest Service, Recreation Management. 1986 Washington, DC. \*\*\*

U.S. Department of Interior. **National Survey of Fishing, Hunting and Wildlife-Associated Recreation 1991**. National Overview, Preliminary Findings. U.S. Fish and Wildlife Service, Division of Federal Aid. Washington, DC.

University of Missouri Extension Service. 1989 "Social and Economic Profile of Callaway County." Office of Social and Economic Data Analysis, Columbia, MO.

Urban Missourians' Interests in Fish, Forests and Wildlife: Results of a 1989 Citizen Survey. Report 1 of "7-City Survey Series"; 7-City Totals. Missouri Department of Natural Resources, Jefferson City, MO.

Witter, Daniel J. "City Mouse, Country Mouse." **Missouri Conservationist**. (February) 1992. Jefferson City, MO.

Witter, Daniel J. 1991. "Wildlife Related Recreation in a New Age", Presented at the 53rd Midwest Fish and Wildlife Conference in Des Moines, IA. \*\*\*

\*\*\* - denotes Literature Cited

# APPENDICES

## APPENDIX A

### MARK TWAIN NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN

The Cedar Creek District falls into three Management Prescriptions of the Mark Twain National Forest Land and Management Plan 1986 (LMP). The corridor of Cedar Creek, 29 miles in length and 0.25 mile in width, is classified as 6.3 under the special area management for a National River Candidate. Actual FS ownership along this area is minimal, "activities may enhance conditions but will not reduce the present characteristics". The Smith Creek area, almost 1600 acres, is 6.1 semi-primitive non motorized. And the rest of the District in the 3.4 management prescription which emphasizes wildlife management.

### FOREST MANAGEMENT DIRECTION - CHAPTER IV

#### **Recreation Management Goals**

Implement the Recreation Opportunity Spectrum (ROS) as the primary system for characterizing, locating, and managing recreation opportunities.

Recognize and manage unique natural environments so they will be perpetuated for future use and enjoyment. Seek the highest order classification for each potential or existing candidate area, including research natural area status.

Implement a cultural resource management program that responds to legal requirements and intrinsic values in a cost efficient manner.

Provide for recreation activities that emphasize dispersed use and are suited to large areas of public land.

Implement the Visual Management System (VMS) to ensure a high quality visual resource.

## MANAGEMENT PRESCRIPTION 3.4

This prescription provides a managed forest which emphasizes wildlife habitat diversity to maintain and enhance populations of native and naturalized vertebrates.

### Purposes of this Prescription:

- (1) To emphasize wildlife habitat diversity by maintaining and enhancing populations of native and naturalized vertebrates and the habitat for management indicator species.
- (2) To emphasize recreational opportunities based on consumptive and non consumptive use of wildlife and fish.
- (3) To provide dispersed recreation opportunities featuring a roaded natural recreation environment.
- (4) To provide for moderate to high production of other resources such as timber products, recreation, forage, and minerals.
- (5) To satisfy the management requirements of 36 CFR 219.27.

### DESIRED FUTURE FOREST CONDITION

Management area will generally be 2500 acres or larger.

There may often be evidence of human activities, but it will be in harmony with the natural appearing environment. Interaction between users will be moderate.

The user should be capable of exercising outdoor skills in an environment that offers a moderate degree of risk and challenge. The opportunity to experience solitude, independence, and closeness to nature may be present. It is not guaranteed however because of intrusions from other activities. Developed Recreation opportunities may be provided.

**Management Practices and Associated Standards and Guidelines: MA 3.4**  
**2300 Recreation Management**  
**Recreation Opportunities**

Apply Roaded Natural ROS class objectives to this area.

Off-road vehicle areas will not be developed within this management area.

**Trails**

Density for all types of trails should not exceed an average of 2 miles per square mile of National Forest System lands.

## MANAGEMENT PRESCRIPTION 6.1

This prescription features management of natural vegetative communities and their successional stages under limited investments to provide nonmotorized semi-private dispersed recreation.

### **Purpose of this Prescription:**

- (1) To manage natural vegetative communities and their successional stages under limited investment.
- (2) To provide wildlife habitat diversity common to managed natural communities.
- (3) To provide dispersed recreation opportunities emphasizing Semi-Primitive Nonmotorized ROS objectives.
- (4) To provide for low to moderate production of other resources such as timber products, fish and wildlife, and forage where they do not substantially limit natural vegetative community management opportunities or dispersed semi-primitive non-motorized recreation objectives.
- (5) To satisfy the management requirements of 36 CFR 219.27.

### **DESIRED FUTURE FOREST CONDITION**

These forest areas will normally be 2500 acres or larger. Management will be managed to emphasize semi-primitive non-motorized forest conditions. Motorized vehicular access for recreational activities will not be permitted. Access for project activities will be limited to temporary roads and skid trails. All existing roads will be closed subject to existing rights and authorized exceptions and allowed to revert to a natural condition.

Emphasis will be on access by foot or horse trails. Facilities, structures, utility corridors, and developments will not be permitted unless subject to existing rights.

**NATIONAL RIVER CANDIDATE AREAS**  
**1900 Land and Resource Management Planning**  
**Scenic and Recreation Segments**

The Forest Service will work with State and other Federal agencies, organizations and individuals to determine when a river study(s) should be initiated.

Rivers identified as eligible for inclusion in the National Wild and Scenic Rivers System that are located within the Forest boundaries and their best potential classification by segment area:

| NRI River   | Best Potential Classification | Recommended Segment | Segment Description | Length (Miles) |
|-------------|-------------------------------|---------------------|---------------------|----------------|
| Cedar Creek | Recreation                    | 1                   | Creek within MTNF   | 29             |

Until designation decisions are made, National Forest System lands associated with eligible river corridors will be managed to perpetuate their current condition. Management activities may enhance conditions but will not reduce the present characteristics below the standards for the best potential classification assigned.

The protection area is normally defined as National Forest System lands extending 0.25 mile in width from the bank,(s) of the river.

Management practices including construction of minor structures for such purposes as improvements of fish and game habitat; river access; grazing; protection from fire, insects or disease; and rehabilitation or stabilization of damaged resources are permitted, provided the area will remain natural appearing and practices of structures will harmonize with the environment.

When lands meeting the definition for minimum level management are encountered within eligible river corridors, they will be managed under Management Area 9.1 standards to the extent river eligibility and best potential classification are not jeopardized.

## **2300 Recreation Management Scenic Segments**

ROS classification Semi-Primitive Motorized will be applied.

Construction of major public use areas is prohibited; simple recreation facilities to protect the values of the river area and provide for the safety and convenience of the users are permitted in keeping with a natural setting.

Substantial additions to existing improvements or structures are prohibited.

### **Recreation Segments**

ROS classification Roaded Natural will be applied.

Recreation facilities to protect the values of the river area while facilitating public use are permitted in keeping with a natural setting.

Additions to existing improvements and structures are permitted.

### **Visual Management**

#### **Recreation Segments**

A Visual Quality Objective of Retention or Partial Retention is assigned except for specific sites developed to accommodate public use which shall not drop below a VQO of modification for the impacted area.

**NATIONAL RIVER CANDIDATE AREAS**  
**1900 Land and Resource Management Planning**  
**Scenic and Recreation Segments**

The Forest Service will work with State and other Federal agencies, organizations and individuals to determine when a river study(s) should be initiated.

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### **Recreation Segments**

ROS classification Roaded Natural will be applied.

Recreation facilities to protect the values of the river area while facilitating public use are permitted in keeping with a natural setting.

Additions to existing improvements and structures are permitted.

### **Visual Management**

#### **Recreation Segments**

A Visual Quality Objective of Retention or Partial Retention is assigned except for specific sites developed to accommodate public use which shall not drop below a VQO of modification for the impacted area.

## APPENDIX B

### RECREATION OPPORTUNITY SPECTRUM

The current condiditon on the District falls under the Rural and Roaded Natural spectrums. The Desired Future conditions are stated in the FP, Appendix A, as roaded natural MA 3.4, semi-primitive non motorized MA 6.1 and semi-primitive motorized MA 6.3.

Table 1

| ROS<br>Activity Characterization*   |  |  |  |  |   |
|---|--|--|--|--|---|
| Primitive   | Semi-Primitive<br>Non-Motorized  | Semi-Primitive<br>Motorized  | Roaded<br>Natural  | Rural  | Urban   |
| <u>Land Based:</u>  | <u>Land Based:</u>   | <u>Land Based:</u>   | <u>Land Based:</u>   | <u>Land Based:</u>   | <u>Land Based:</u>  |
| Viewing Scenery<br>Hiking and Walking<br>Horseback Riding<br>Tent Camping<br>Hunting<br>Nature Study<br>Mountain Climbing | Viewing Scenery<br>Automobile (off-road use)<br>Motorcycle and Scooter Use<br>Specialized Landcraft Use<br>Aircraft Use<br>Hiking and Walking<br>Horseback Riding<br>Camping<br>Hunting<br>Nature Study<br>Mountain Climbing | Viewing Scenery<br>Viewing Activities<br>Viewing Works of Human-Kind<br>Automobile (includes off-road use)<br>Motorcycle and Scooter Use<br>Specialized Landcraft Use<br>Train and Bus Touring<br>Aircraft Use<br>Aerial Trams and Lifts Use<br>Hiking and Walking<br>Bicycling<br>Horseback Riding<br>Camping<br>Picnicking | Viewing Scenery<br>Viewing Activities<br>Viewing Works of Human-Kind<br>Automobile (includes off-road use)<br>Motorcycle and Scooter Use<br>Specialized Landcraft Use<br>Train and Bus Touring<br>Aircraft Use<br>Aerial Trams and Lifts Use<br>Hiking and Walking<br>Bicycling<br>Horseback Riding<br>Camping<br>Picnicking<br>Resort and Commercial Services Use | Viewing Scenery<br>Viewing Activities<br>Viewing Works of Human-Kind<br>Automobile (includes off-road use)<br>Motorcycle and Scooter Use<br>Specialized Landcraft Use<br>Train and Bus Touring<br>Aircraft Use<br>Aerial Trams and Lifts Use<br>Hiking and Walking<br>Bicycling<br>Horseback Riding<br>Camping<br>Picnicking<br>Resort Lodging<br>Recreation Cabin Use | Viewing Scenery<br>Viewing Activities<br>Viewing Works of Human-Kind<br>Automobile (includes off-road use)<br>Motorcycle and Scooter Use<br>Specialized Landcraft Use<br>Train and Bus Touring<br>Aircraft Use<br>Aerial Trams and Lifts Use<br>Hiking and Walking<br>Bicycling<br>Horseback Riding<br>Camping<br>Picnicking<br>Resort and Commercial Services Use<br>Resort Lodging<br>Recreation Cabin Use<br>Hunting<br>Nature Studies<br>Gathering Forest Products<br>Interpretive Services<br>Team Sports Participation<br>Individual Sports Participation<br>Games and Play Participation |
| <u>Water Based:</u>   | <u>Water Based:</u>  | <u>Water Based:</u>  | <u>Water Based:</u>  | <u>Water Based:</u>  | <u>Water Based:</u>   |
| Canoeing<br>Other Watercraft (non-motorized use)<br>Swimming<br>Fishing   | Boating (powered)<br>Canoeing<br>Sailing<br>Other Boating<br>Swimming<br>Diving (skin or scuba)<br>Fishing   | Boating (powered)<br>Canoeing<br>Sailing<br>Other Boating<br>Swimming<br>Diving (skin or scuba)<br>Fishing   | Tour Boat and Ferry Use<br>Boat (Powered)<br>Canoeing<br>Sailing<br>Other Watercraft Use<br>Swimming and Waterplay<br>Diving (skin and scuba)<br>Waterskiing and Water-Sports<br>Fishing   | Tour Boat and Ferry Use<br>Boat (Powered)<br>Canoeing<br>Sailing<br>Other Watercraft Use<br>Swimming and Waterplay<br>Diving (skin and scuba)<br>Waterskiing and Watersports<br>Fishing  | Tour Boat and Ferry Use<br>Boat (Powered)<br>Canoeing<br>Sailing<br>Other Watercraft Use<br>Swimming and Waterplay<br>Diving (skin and scuba)<br>Waterskiing and Watersports<br>Fishing   |
| <u>Snow and Ice Based:</u>  | <u>Snow and Ice Based:</u>   | <u>Snow and Ice Based:</u>   | <u>Snow and Ice Based:</u>   | <u>Snow and Ice Based:</u>   | <u>Snow and Ice Based:</u>  |
| Snowplay<br>X-Country Sking/Snowshoeing   | Ice and Snowcraft Use<br>Skiing, Downhill<br>Snowplay<br>X-Country Sking/Snowshoeing   | Ice and Snowcraft Use<br>Skiing, Downhill<br>Snowplay<br>X-Country Sking/Snowshoeing   | Tour Boat and Ferry Use<br>Boat (Powered)<br>Canoeing<br>Sailing<br>Other Watercraft Use<br>Swimming and Waterplay<br>Diving (skin and scuba)<br>Waterskiing and Water-Sports<br>Fishing   | Ice and Snowcraft Use<br>Ice Skating<br>Sledding and Tobogganing<br>Downhill Sking<br>Snowplay<br>X-Country Sking/Snowshoeing  | Ice and Snowcraft Use<br>Ice Skating<br>Sledding and Tobogganing<br>Downhill Sking<br>Snowplay<br>X-Country Sking/Snowshoeing   |

\*These activities (from RI M FSH 2309.11) are illustrative only. Specific additions or exception of activities within a ROS class may occur depending upon local forest situations.

Table 1 (Continued)

| ROS<br>Experience Characterization*   |   |   |  |   |  |
|---|---|---|--|---|--|
| Primitive   | Semi-Primitive<br>Non-Motorized   | Semi-Primitive<br>Motorized   | Roaded<br>Natural  | Rural   | Urban  |
| Extremely high probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers a high degree of challenge and risk | High, but not extremely high, probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk | Moderate probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk. Opportunity to have a high degree of interaction with the natural environment. Opportunity to use motorized equipment while in the area | About equal probability to experience affiliation with other user groups and for isolation from sights and sound of humans. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities associated with more primitive type of recreation are not very important. Practice and testing of outdoor skills might be important. Opportunities for both motorized and non-motorized forms of recreation are possible | Probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. These factors are generally more important than the setting of the physical environment. Opportunities for wildland challenges, risk-taking, and testing of outdoor skills are generally unimportant except for specific activities like downhill skiing, for which challenge and risk-taking are important elements | Probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. Experiencing natural environments, having challenges and risks afforded by the natural environment, and the use of outdoor skills are relatively unimportant. Opportunities for competitive and spectator sports and for passive uses of highly human-influenced parks and open spaces are common |

\*These experiences are highly probable outcomes of participating in recreation activities in specific recreation settings.

Table 1 (continued)

| ROS<br>Setting Characterization*  |  |   |  |   |   |
|---|--|---|--|---|---|
| Primitive   | Semi-Primitive<br>Non-Motorized  | Semi-Primitive<br>Motorized   | Roaded<br>Natural  | Rural   | Urban   |
| Area is characterized by essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted | Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not permitted | Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted | Area is characterized by predominantly natural-appearing environments with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities | Area is characterized by substantially modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided far away from developed sites. Facilities for intensified motorized use and parking are available | Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modification and utilization practices are to enhance specific recreation activities. Vegetative cover is often exotic and manicured. Sights and sounds of humans, on-site, are predominant. Large numbers of users can be expected, both on-site and in nearby areas. Facilities for highly intensified motor use and parking are available with forms of mass transit often available to carry people throughout the site |

\*This table is for descriptive purposes only. Use the five specific ROS class delineation criteria given in Table 2 to identify the actual areas to which these descriptions apply.

# RECREATION OPPORTUNITY GUIDE

United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District

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## INTRODUCTION

Welcome to the Cedar Creek Ranger District!

This District contains 15,200 acres of Federal Land which offers the Forest visitor a wide variety of recreational opportunities. This section tells you what those opportunities are, where they can be found, and how to make them more enjoyable. Remember, we are here to help you; feel free to ask questions.

Enjoy your visit to the Cedar Creek Ranger District. (314) 642-6726.

## FORAGE/RANGE

Open lands provide forage for cattle as well as a diversified habitat for wildlife. About 50 local farmers and ranchers are authorized to graze their cattle on National Forest allotments. Besides paying a grazing fee, permittees are required to maintain the allotment fences, forage quality, and soil fertility.

## WATER

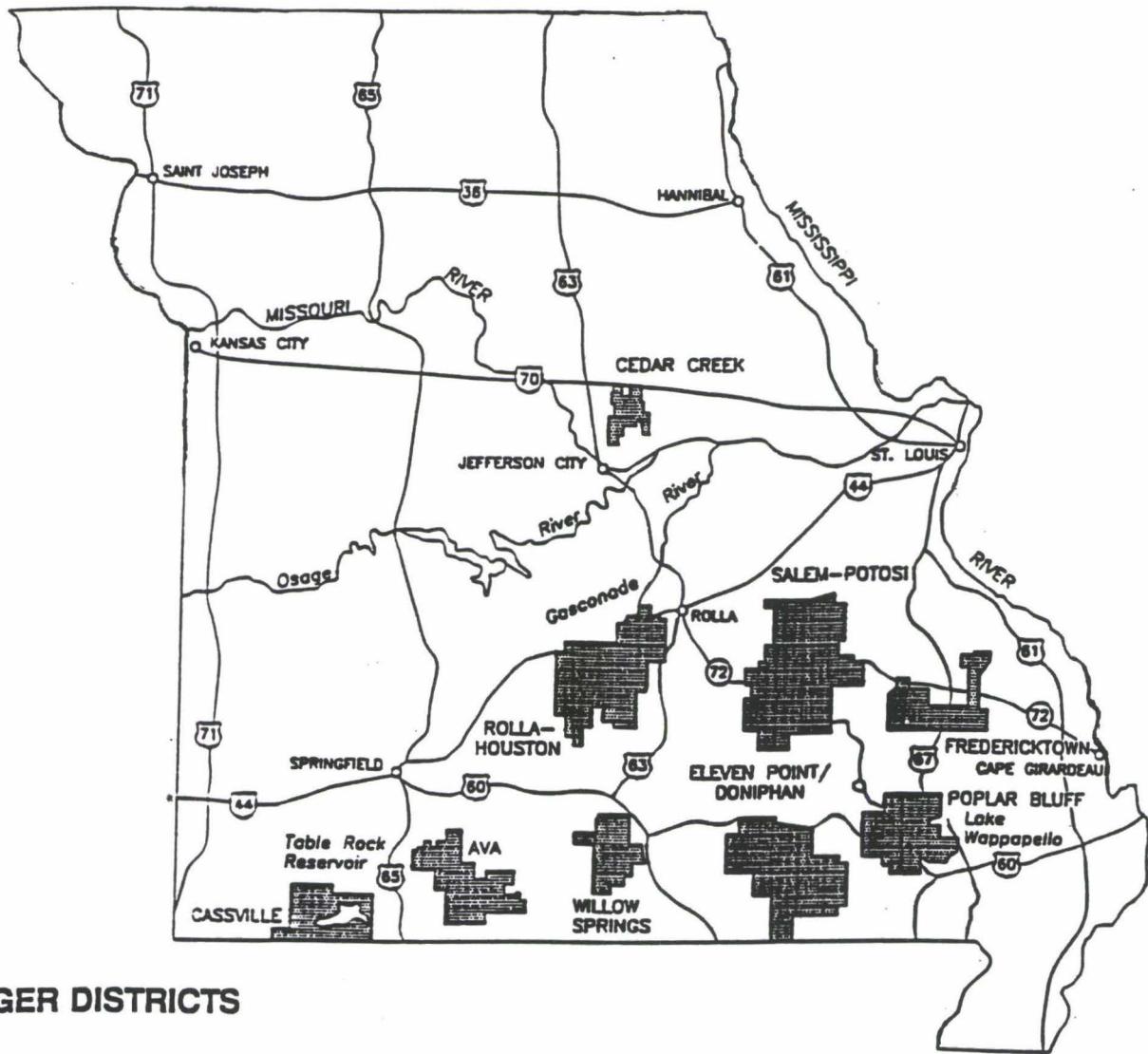
To many people, Cedar Creek means the stream for which the Ranger District was named. Most of the District land area is within the Cedar Creek drainage. Recreation opportunities associated with this stream are similar to those of other mid-Missouri streams, such as boating during spring run-off and fishing.

## TIMBER

Timber management activities on the District are used to provide high quality esthetic benefits, to achieve diversity for wildlife habitat, and to demonstrate good small-woodland management to private landowners in the area. The Cedar Creek District, under the Land and Resource Management Plan, is managed under an uneven-aged silvicultural system.

**Commercial Timber Sales.** The District has a small timber sale program, occasionally offering cedar, oak-hickory, and low quality hardwoods (commercial firewood) for sale. Contact the District office if you are interested in being on the mailing list to receive bid information for timber sales.

# MARK TWAIN NATIONAL FOREST



## RANGER DISTRICTS

District Ranger  
1103 South Jefferson  
P.O. Box 188  
Ava, MO 65608

District Ranger  
Highway 248 East  
P.O. Box 310  
Cassville, MO 65625

District Ranger  
Cedar Creek Ranger District  
4965 County Road 304  
Fulton, MO 65251

District Ranger  
1104 Walnut  
Doniphan, MO 63935

District Ranger  
Hwy. 72 & OO  
Route 2, Box 175  
Fredericktown, MO 63645

District Ranger  
108 S. Sam Houston Blvd.  
Houston, MO 65483

District Ranger  
1420 Maude  
P.O. Box 988  
Poplar Bluff, MO 63901

District Ranger  
Highway 8 West  
P.O. Box 188  
Potosi, MO 63664

District Ranger  
401 Fairgrounds Road  
Rolla, MO 65401

District Ranger  
1301 South Main  
P.O. Box 460  
Salem, MO 65560

District Ranger  
Watercress Road  
P.O. Box 69  
Van Buren, MO 63965

District Ranger  
Old Springfield Road  
P.O. Box 99  
Willow Springs, MO 65793

District Ranger  
Highway 19 North  
Route 1, Box 182  
Winona, MO 65588

# CAMPING AND PICNICKING

United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District

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## CONTENTS: CAMPING AND PICNICKING

|                                 |      |
|---------------------------------|------|
| Map                             | CP-2 |
| Pine Ridge Recreation Area      | CP-3 |
| Carrington Pits Recreation Area | CP-4 |

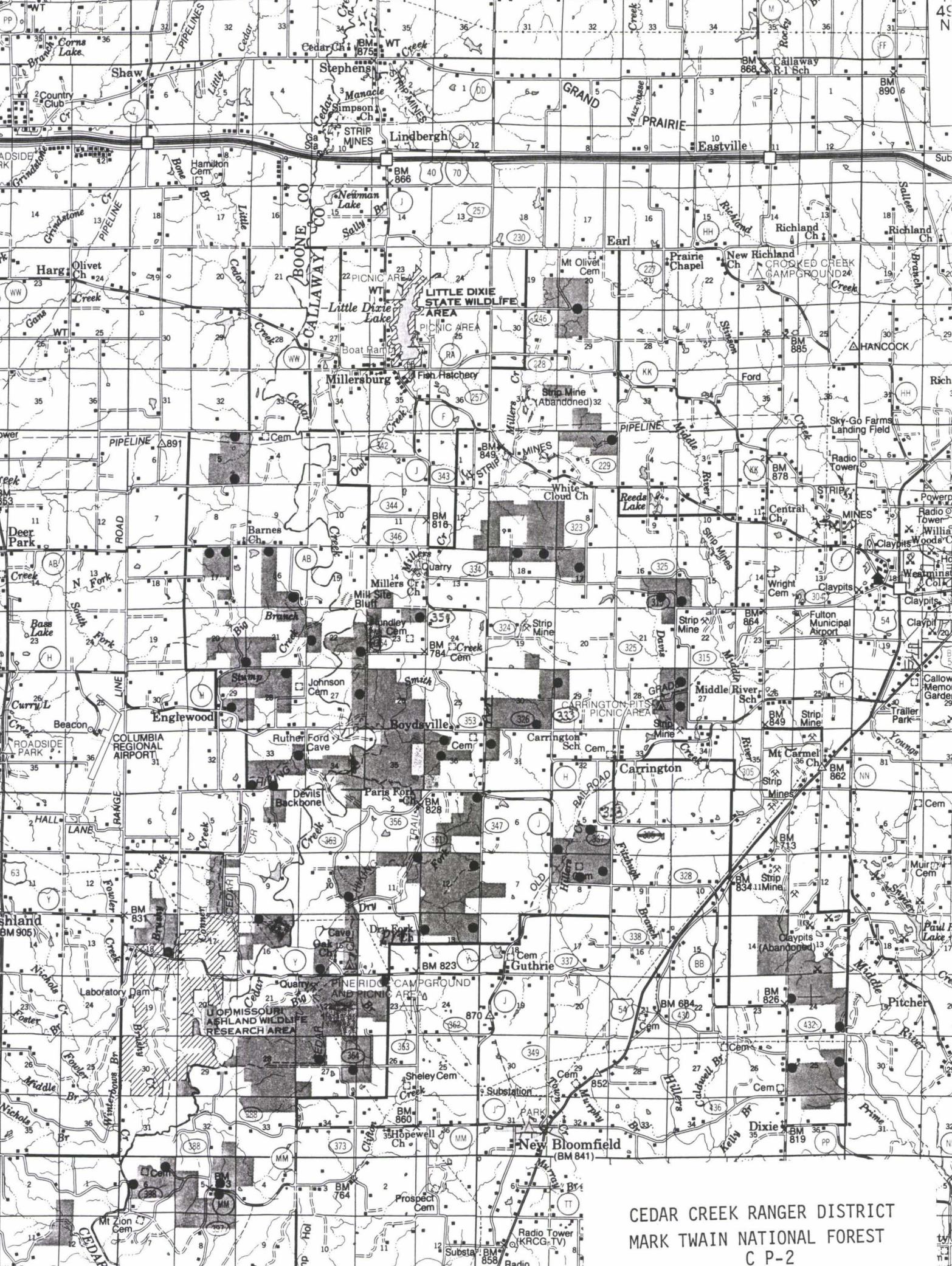
## INTRODUCTION

If you prefer a more primitive setting without facilities, you can camp and picnic anywhere on National Forest System lands. About 60 parking areas scattered over the District offer sites to leave your vehicles while you explore. Approximately one-third of the District is in openlands which are grazed by cattle during the spring and summer. Structures, such as self-closing gaps, ladders, and walk-through "V's" are provided at several of the parking areas to facilitate access to the openlands which are fenced. Following is a description of some of the more popular undeveloped sites.

The **Round Prairie Site** offers a native prairie experience, surrounded by over 140 acres of warm-season grasses and forbs established by the Forest Service to benefit wildlife and provide summer forage. The Round Prairie Site is an old house place which has a circle drive accommodating several vehicles and trailers. Facilities available are two picnic tables and a fire ring. Round Prairie Site is located northwest of Carrington. Take Route H to County Road #333 and go north 1 mile.

The **Boydsville Site** is tucked in oak-hickory woods 1 mile west of Route J on County Road #353, near Boydsville, Missouri. The site adjoins the popular hunting, hiking, and riding area called Smith Creek, which is managed for a semi-primitive non-motorized recreation experience. The Boydsville Site has no facilities other than a graveled parking area large enough to accommodate several vehicles.

The **Dry Fork Site** is situated in an old field with scattered, large shade trees and shrubs. Take Route J to County Road #356 and go 1.25 miles west to Paris Fork Church, turn south and go about 1 mile on County Road #361. Facilities include two picnic tables, a grill, firering and large parking area.



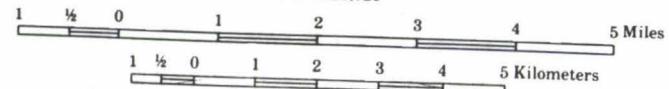
CEDAR CREEK RANGER DISTRICT  
MARK TWAIN NATIONAL FOREST  
C P-2

U.S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
R. MAX PETERSON, CHIEF

MARK TWAIN NATIONAL FOREST  
(CEDAR CREEK PURCHASE UNIT)  
MISSOURI  
FIFTH PRINCIPAL MERIDIAN

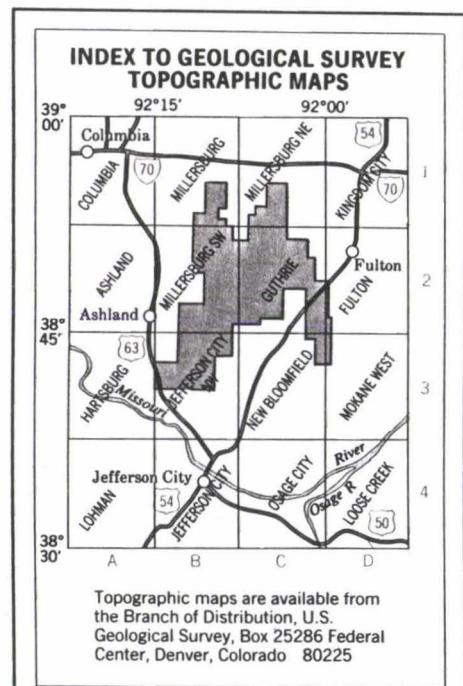
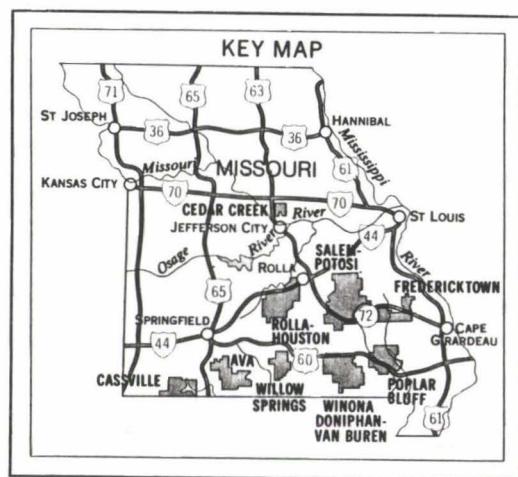
1986

Scale 1:126,720



LEGEND

- Purchase Unit Boundary
- - - County Boundary
- - - Reservation Boundary
- 70 54 Interstate and U.S. Highways
- OP 337 State Road
- County Road
- Primary Highway
- Secondary Highway
- Light Duty Road
- Primitive Road
- Trail
- Highway Interchange
- Railroad
-  District Ranger Office
-  Recreation Site, Forest Service
-  Other Recreation Site
-  Dam
-  Mine or Quarry
-  Gravel or Clay Pit
-  Building, Church, School
-  Cemetery
-  Located or Landmark Object
-  Horizontal Control Station
-  Horizontal Control Station and Permanent Lookout Station
-  Mark Twain National Forest Land
- PARKING AREAS



These topographic maps also available for \$2.64 each at the Cedar Creek District office 4965 County Road 304 Fulton, MO 65251

This map is a photocopy of a color original which is available for \$2.11 at the Cedar Creek District office: 4965 County RD 511 MO 65251

# CAMPING AND PICNICKING

United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District



## PINE RIDGE RECREATION AREA

**GETTING THERE:** Pine Ridge Recreation and Camping Area can be found by traveling about 2.5 miles west of Guthrie on Route Y. From Ashland, travel 7 miles east on Route Y.

**FACILITIES:** Tables, pedestal grills, fire rings, drinking water, and a vault toilet are available at Pine Ridge. Two spurs offer adequate space for trailers, but there are no hook-ups for water, electricity, or sewage. A picnic site and the toilet are accessible to persons in wheelchairs.

**ATTRACTI0NS:** The pine trees at the site, planted by the Civilian Conservation Corps in the 1930's, provide a "pine" experience not commonly found north of the Missouri River. The trailhead for the Cedar Creek Hiking Trail is located at the east end of the recreation site.

**LAW ENFORCEMENT:**  
Callaway County Sheriff.....314-642-7291  
**EMERGENCIES:** 911

**MEDICAL AID:**  
Callaway Community Hospital .....314-642-3376  
Fulton

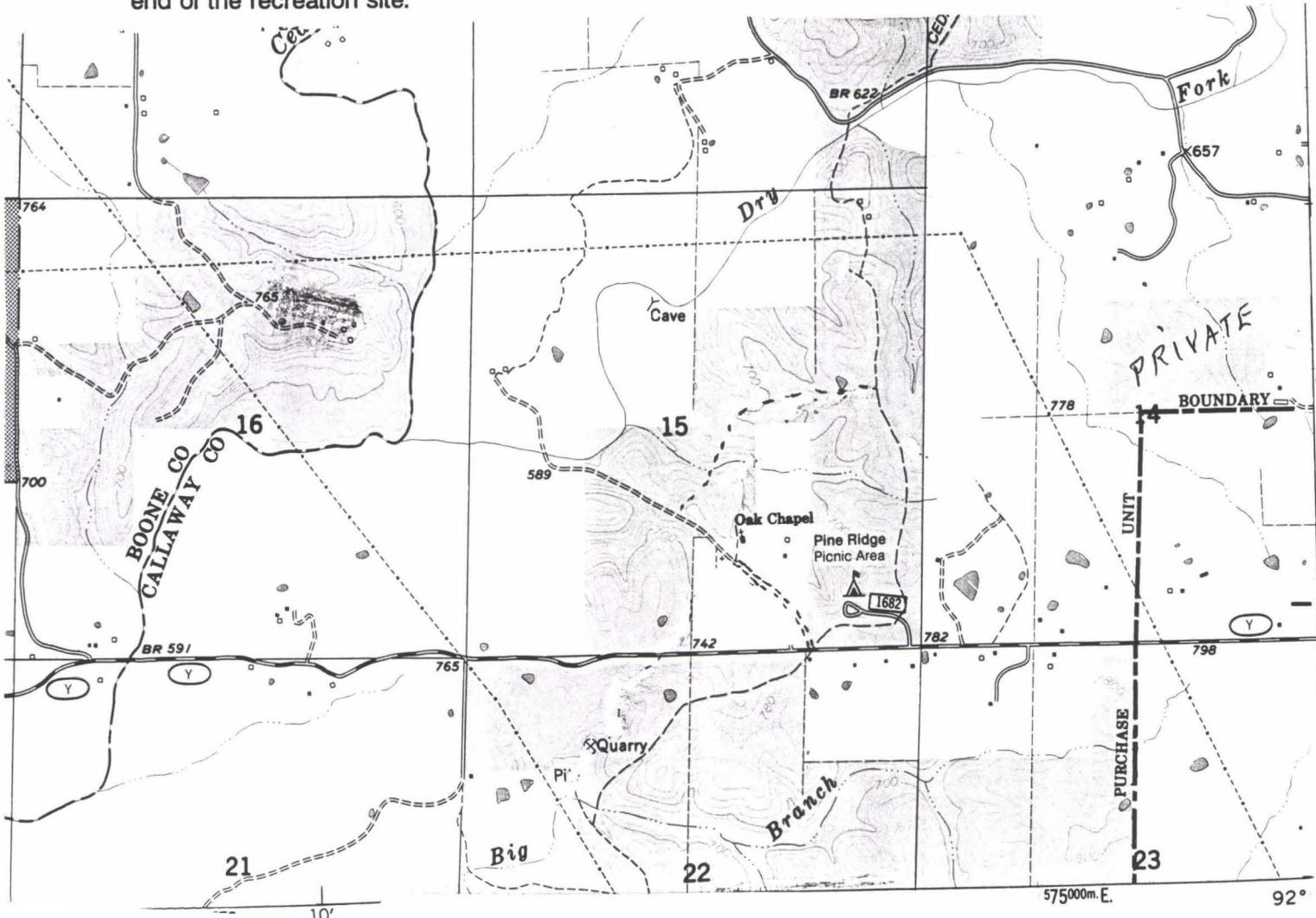
**General Use:** Camping and picnicking

**Fee:** No

**Visitor Use:** Moderate

**ROS:** Roaded Natural

**Recommended Season:** Year-round



# CAMPING AND PICNICKING

United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District



## CARRINGTON PITS RECREATION SITE

**GETTING THERE:** Travel north 1 mile on County Road #315 off Route H near Carrington, Missouri. Turn west at the sign and go about 1 mile to the site.

**FACILITIES:** Carrington Pits is small with only 3 picnic units (table, fire ring, and pedestal grill) and a vault toilet. A small boat ramp provides access to the pits.

**ATTRACTI0NS:** The abandoned coal mining pits, approximately 4 acres of water, provide fishing opportunities. You can fish from the bank or put in a small boat or canoe at the gravel ramp provided. "The Pines," as it is sometimes called, consists of pine trees planted during the 1930's by the Civilian Conservation Corp and provides for a forest experience of conifers uncommon north of the Missouri River.

**LAW ENFORCEMENT:**  
Callaway County Sheriff.....314-642-7291  
**EMERGENCIES:** 911

**MEDICAL AID:**  
Callaway Community Hospital.....314-642-3376  
Fulton

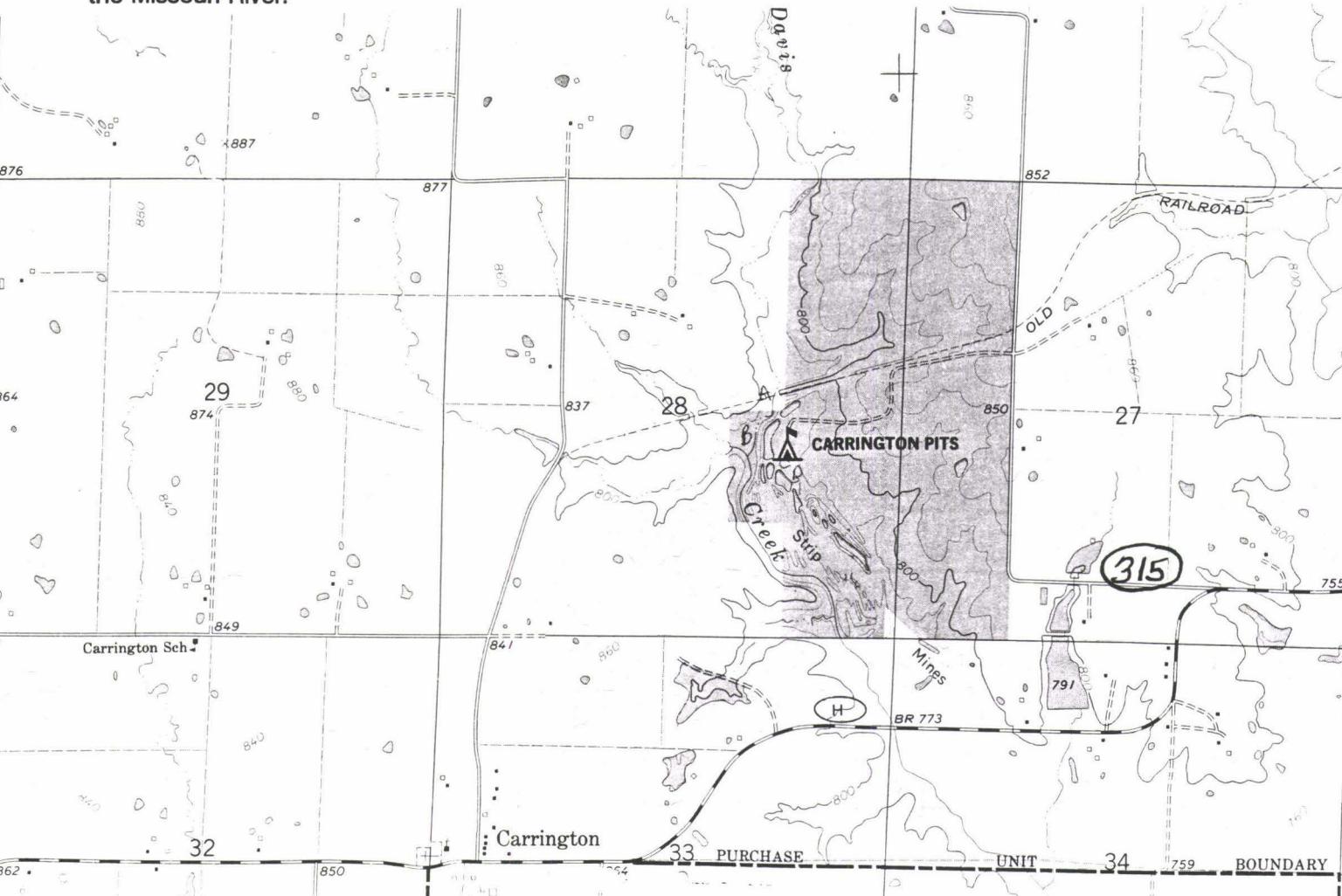
**General Use:** Picnicking and fishing

**Fee:** No

**Visitor Use:** Light to Moderate

**ROS:** Roaded Natural

**Recommended Season:** Year-round



# FISHING



United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District

## CONTENTS:

## GENERAL INFORMATION

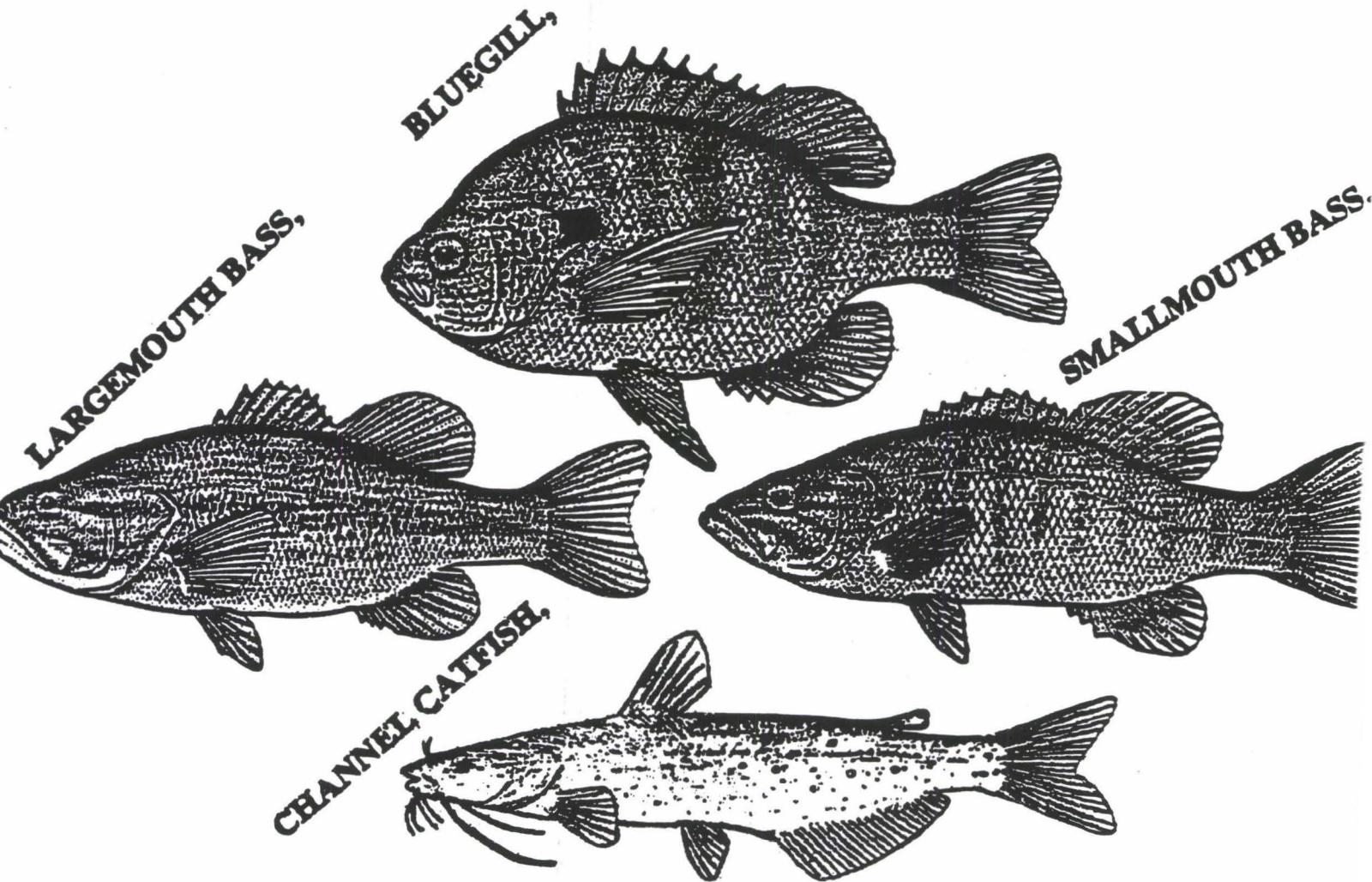
FG 1

## MAP

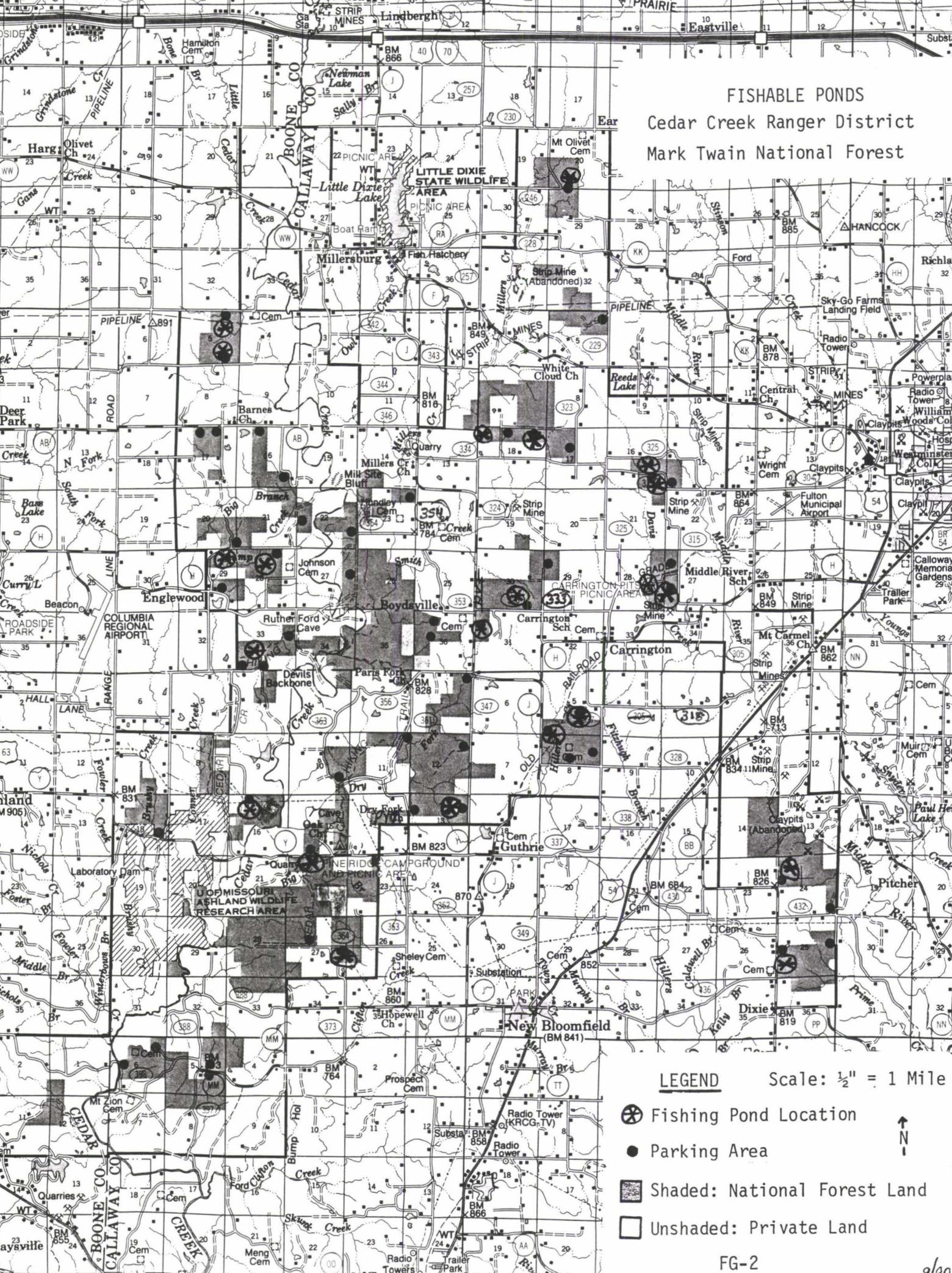
FG 2

Cedar Creek, Middle River, the Carrington Pits and many ponds support healthy fish populations. Most of the ponds were originally private farm ponds and have come under Forest Service management following land acquisition. Most of these ponds were stocked in the past and probably contain populations of largemouth bass, bluegill, and channel catfish. Maps of the fishing locations are available from the District office.

Although the Forest Service manages fishing habitat in the National Forest, the Missouri Department of Conservation (MDC) regulates and manages sport fishing on the Forest. MDC fishing regulations apply in regard to the fishing seasons, methods, size limits, and daily possession limits for fishing on the district. Copies of the MDC fishing regulations can be obtained from MDC or where fishing permits are sold.



FISHABLE PONDS  
Cedar Creek Ranger District  
Mark Twain National Forest



# HISTORY AND ARCHAEOLOGY



United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District

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The lands in the Cedar Creek Ranger District were all privately owned prior to 1937. However, intensive cultivation of farm lands caused severe depletion and erosion of the fragile soils and this area became land nobody wanted. Then, in the early 1940's, the United States Department of Agriculture-Soil Conservation Service, purchased the land and began rebuilding it by filling and stabilizing gullies, reseeding grasses and planting trees.

In 1953, these public lands were transferred to the Forest Service, U.S. Department of Agriculture, for administration and management. The Forest Service is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Management opportunities and applications on the Cedar Creek Ranger District provide for public use and enjoyment of these resources.

On October 7, 1992, President George Bush signed a House Resolution "to designate certain land in the State of Missouri... as part of the Mark Twain National Forest." At that time Cedar Creek officially became part of the National Forest System and its status changed from Purchase Unit to Ranger District.





# HUNTING

United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District

## CONTENTS: HUNTING

Hunting is allowed on all Forest Service lands in accordance with State game regulations. Remember that private lands are intermingled with the public lands. Discharging a firearm in or within 150 yards of a residence, building, campsite, developed recreation site, or occupied area is not allowed.

Popular game species hunted on the District include bobwhite quail, mourning dove, woodcock, wild turkey, ruffed grouse, cottontail rabbit, grey and fox squirrel, and white-tailed deer.

Only temporary deer stands may be used on Forest Service lands. Permanent stands are removed by District Personnel as they are located.

**Now a word of caution:** Missouri has a very strict trespass law concerning land ownership rights. Using private land can result in prosecution for trespassing. The law supports landowner's rights in these situations.



# IDENTIFICATION AND GATHERING



United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District

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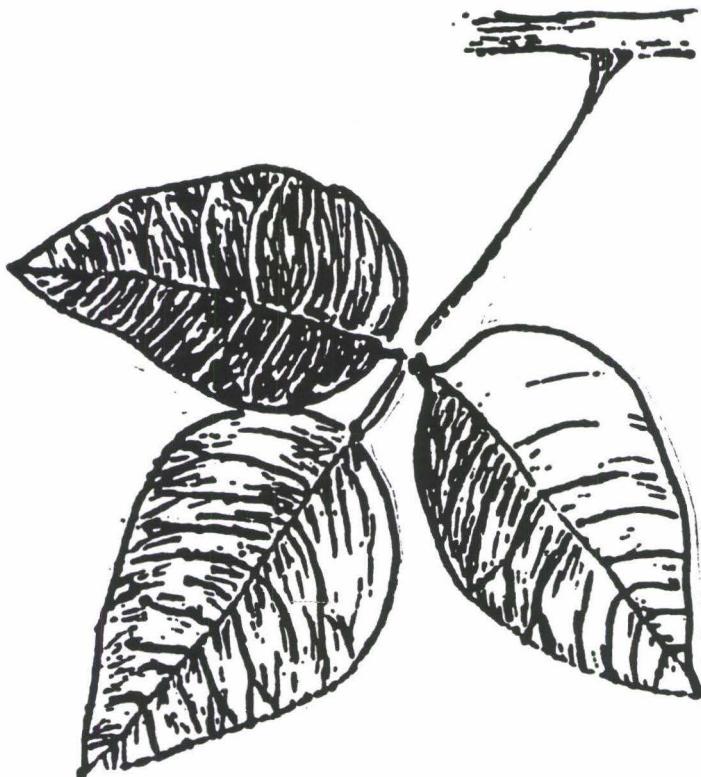
**GENERAL OPPORTUNITIES:** Opportunities for obtaining berries, firewood, and other forest resources are abundant on the Mark Twain National Forest and the Cedar Creek Ranger District.

Some resources are best collected through photography. The diversity of plant and animal life, the many different geological features, and the sheer beauty of many areas are all good subjects for photography.

**PERSONAL USE FIREWOOD:** The Cedar Creek area has a great demand for firewood. Besides providing fuel for homes, firewood cutting on the District is designed to accomplish wildlife habitat improvement, timber stand improvement, or follow-up of timber sale logging areas. The areas designated for firewood cutting change annually.

The permits, which are for three cords, are issued on a first-served basis, usually on a Saturday in late summer. The firewood is for personal use only and cannot be resold. Also, permits are limited to one per household. Contact the District office for more details.

**CHRISTMAS TREE POLICY:** Selecting and cutting your own Christmas tree from public land is a highly desirable recreational experience. The most desirable species such as spruce, fir or scotch pine are not native to our area. Borderline species such as cedar and shortleaf pine do exist, but permits are not issued locally.



**Poison ivy**

# IDENTIFICATION AND GATHERING



United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District

## GATHERING WILD EDIBLES

Common plants can provide a variety for the table. To fully utilize these natural foods requires knowledge, identification skills and lots of time to locate, collect and prepare them. The following chart gives you an idea of when to collect certain plants. Location for successful collection vary with the species desired. For berries, try looking along county roads or in clearings. The farther you get from the "main track" the more successful your search is likely to be.

Visitors should be careful when collecting any resource. Biting or stinging insects or snakes are often found in or near wood suitable for use as firewood. Poisonous plants often grow in the same area as many berry plants. Also, **make sure you can identify what you are collecting.** Do not disturb rare or endangered plants or animals. These are under state and federal protection.

Please do not dig up plants, leave the root system and some seeds so they will be there for others to enjoy. Gathering wildflowers and shrubs in developed recreation areas is also prohibited.

### WILD EDIBLES CALENDAR:

| PLANT           |                    | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Watercress      |                    | --  | --  | --  | --  | --  | --  | --  | --  | --  | --  | --  | --  |
| Blackberry      |                    |     |     |     |     |     |     | --  | --  |     |     |     |     |
| Persimmon       |                    |     |     |     |     |     |     |     |     | --  | --  |     |     |
| Black Walnut    |                    |     |     |     |     |     |     |     |     | --  | --  | --  |     |
| Hickory         |                    |     |     |     |     |     |     |     |     | --  | --  | --  |     |
| Red Mulberry    |                    |     |     |     |     | --  | --  | --  |     |     |     |     |     |
| Dandelions:     | leaves<br>flowers  |     |     | --  | --  |     |     |     |     |     |     |     |     |
| Wild Rose:      | Petals<br>Hips     | --  | --  |     |     | --  | --  | --  |     |     | --  | --  |     |
| Elderberry:     | flowers<br>berries |     |     |     |     | --  | --  | --  |     |     | --  | --  |     |
| Morel Mushrooms |                    | --  | --  |     |     |     |     |     |     |     |     |     |     |
| Gooseberry:     | leaves<br>berries  |     |     | --  | --  | --  |     |     |     |     |     |     |     |
| Wild grapes:    | leaves<br>berries  |     |     |     |     |     |     |     | --  | --  | --  | --  |     |

# TRAILS

United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District



## CONTENTS: TRAILS

### CONTENTS

TR 1

### RECREATION AREAS

Cedar Creek Trails

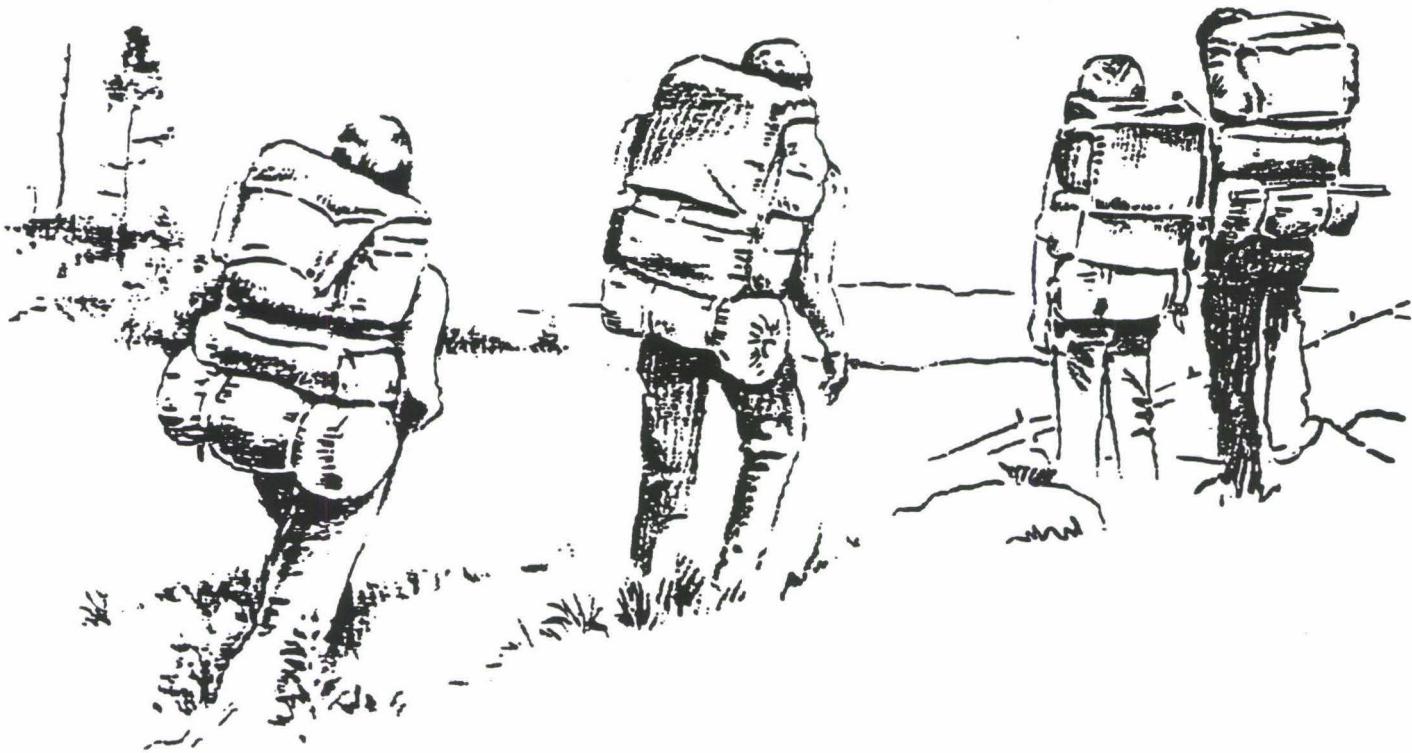
TR 2

Cedar Creek Trail System Map

TR 3

Map of Horse and Mule Gaps

TR-4



# TRAILS

United States  
Department of  
Agriculture

Forest Service  
Mark Twain National Forest  
Cedar Creek Ranger District



## CEDAR CREEK TRAILS

**GETTING THERE:** Trailhead for the Cedar Creek System are located at Pine Ridge and Dry Fork areas, but the trails can be accessed at many places where country roads intersect the routes. Detailed map of the trail is available at the District Office and these trailheads. Self-closing "horse gaps" have been built into several fences on the District to provide access into many pasture areas. TR-4 is a map of areas accessible to horse and mule riding, and parking areas with room to leave your trailer.

**ATTRACTI0NS:** The original Cedar Creek Trail forms a loop, crossing approximately 21 miles of scenic country. About 2/3 of this trail is cross-country and the other 1/3 is on gravel county roads. The trail began as the project of an Eagle Scout in 1972, and has been expanded and maintained by other scouts and volunteer groups since that time. The trail is open to hikers, mountain bicyclers, and horse riders except for a short section of the trail through the Smith Creek area which is designated for hiking only. The section through the Pine Ridge Recreation Area is open to hiking and mountain bicycling only. Grey diamonds mark the trail route and self-closing gaps provide places for recreationists to cross the fenced pasture areas. Small gravelled areas at each tract of National Forest System land provide space for parking.

The northern two loops: The Moon, which covers almost 7 miles in northwest part of the District, named for its' eroded landscape dating back to the 1930's, some of which is still seen today; and Smith Creek loop which traverses our non-motorized semi-primitive area and is about 5 miles in length. These loops were constructed with the help of the Cedar Creek Trails Coalition, a group of hiking, bicycling and horseback riding organizations and individuals interested in improving the trail system on the District. If you are interested in helping with trail maintenance and development, please contact the Cedar Creek District Office.

### LAW ENFORCEMENT:

Callaway County Sheriff .....314-642-7291  
Emergencies: 911

### MEDICAL AID:

Callaway Community .....314-642-3376  
Hospital, Fulton

**Length:** 3 Loops - 5, 7 and 21 Miles. See above for descriptions.

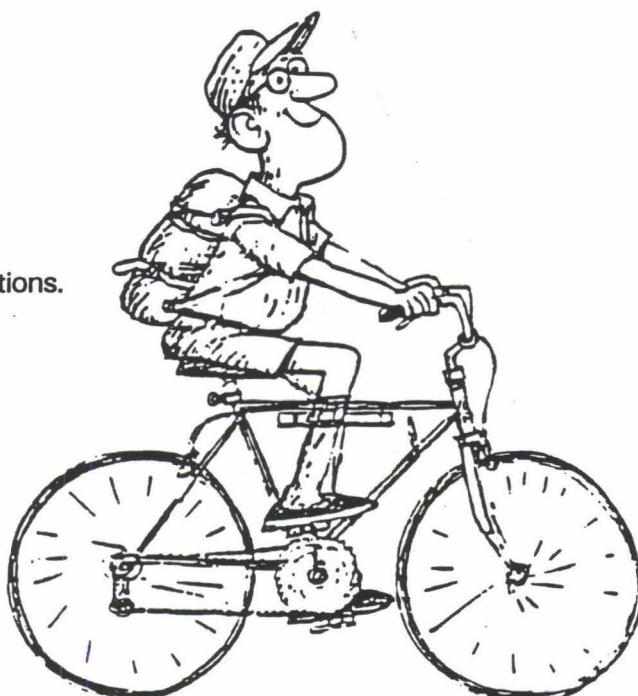
**Use:** Moderate

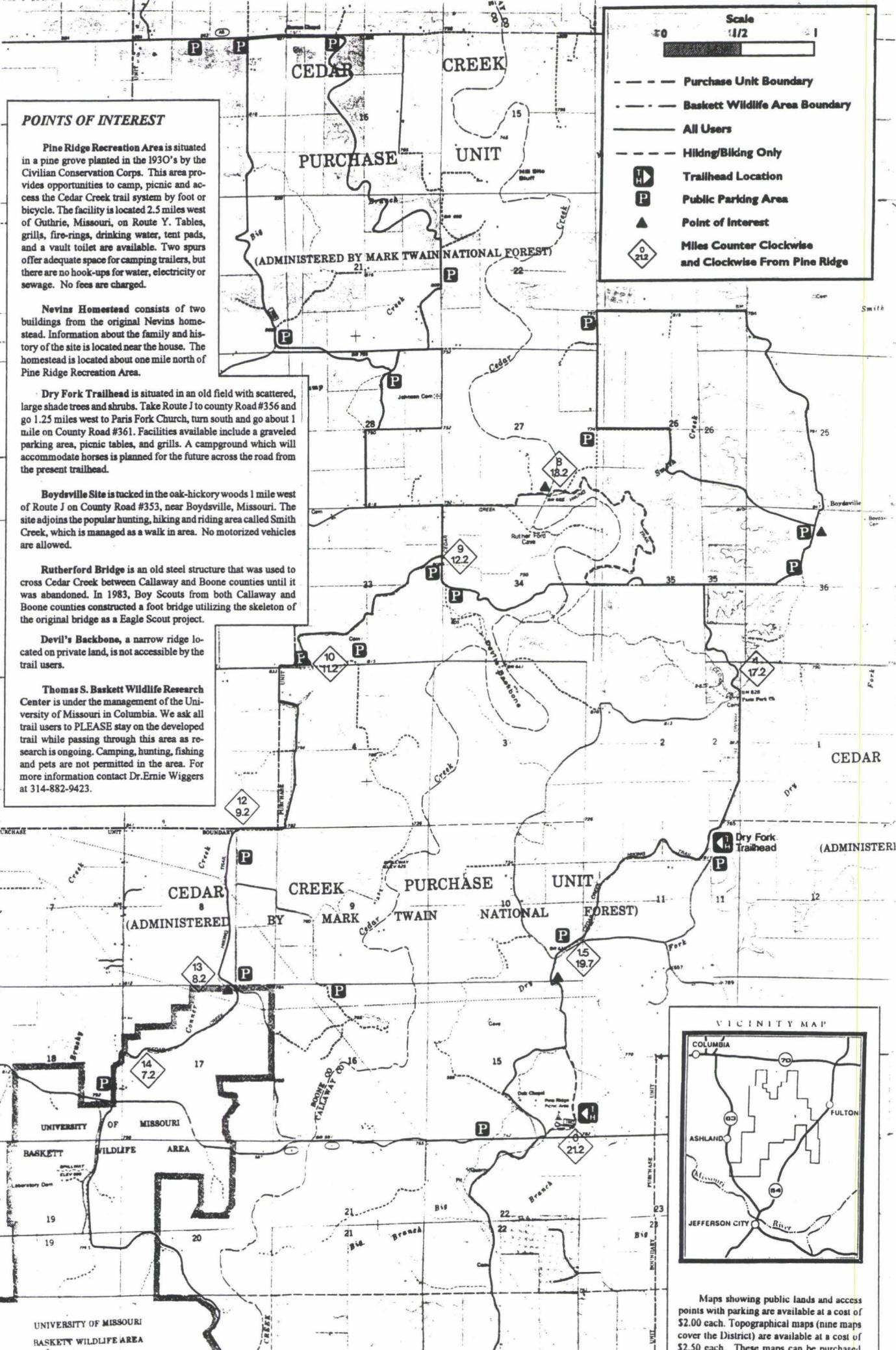
**ROS:** Roaded Natural - Semi-Primitive

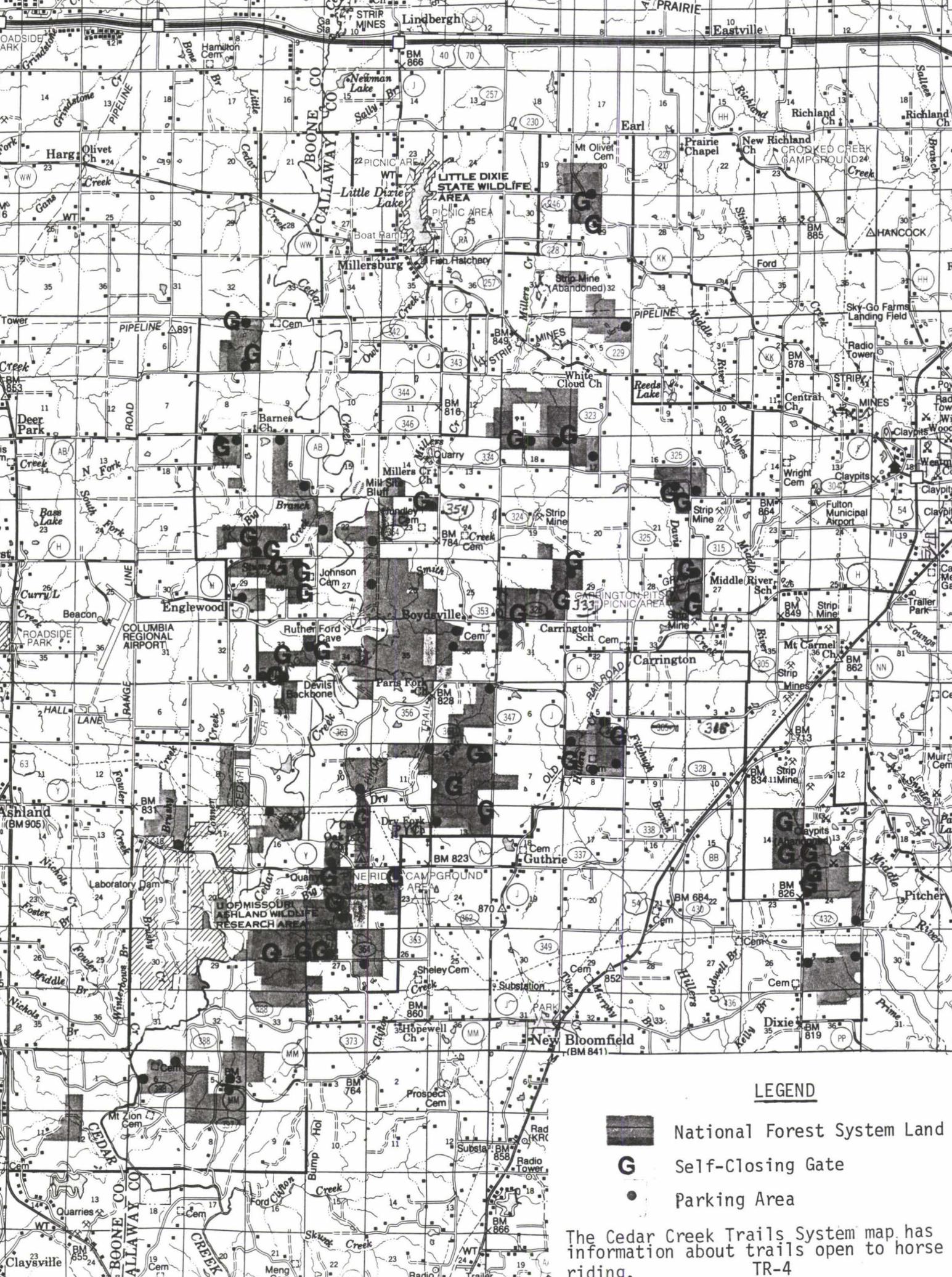
**Difficulty:** Easy to Moderate

**Recommended Season:** Year-round

**Signi0ng:** Marked with grey diamonds







#### LEGEND

- National Forest System Land
- Self-Closing Gate
- Parking Area

The Cedar Creek Trails System map has information about trails open to horse riding.

TR-4

## APPENDIX D

|            |                              |   |
|------------|------------------------------|---|
| Document 1 | Trail System Brochure        | 1 |
| Document 2 | Interpretation Plan -DRAFT-  | 2 |
| Document 3 | ENFIA Information            | 2 |
| Document 4 | Pine Ridge Site Design       | 1 |
| Document 5 | Carrington Pits Trail Design | 2 |
| Document 6 | Dry Fork Campground Concept  | 1 |

 Eastern National Forests Interpretive Association

THE FOLLOWING ITEMS ARE AVAILABLE FOR SALE DURING OFFICE HOURS, 7:30-12:00 & 12:30-4:00, MONDAY THROUGH FRIDAY, AT THE CEDAR CREEK RANGER DISTRICT OFFICE ON AIRPORT ROAD RT.4, BOX 4023, FULTON MISSOURI 65251. FOR MORE INFORMATION, CALL (314) 642-6726. THERE ARE ALSO MANY INFORMATIVE PAMPHLETS THAT ARE AVAILABLE AT NO CHARGE.

GUIDE BOOKS:PRICE (INC. TAX)

|  |         |
|--|---------|
| AUDUBON POCKET GUIDE OF BIRDS - EASTERN NORTH AMERICAN | \$ 7.38 |
| AUDUBON POCKET GUIDE OF INSECTS - NORTH AMERICA        | \$ 5.26 |
| AUDUBON POCKET GUIDE OF MAMMALS - NORTH AMERICA        | \$ 7.38 |
| AUDUBON POCKET GUIDE OF TREES - EASTERN NORTH AMERICA  | \$ 7.38 |
| <br>   |         |
| TREE FINDER-IDENTIFICATION OF TREES BY THEIR LEAVES    | \$ 2.12 |
| PETERSON FIELD GUIDE OF EASTERN BIRDS                  | \$16.94 |
| THE HUMMINGBIRD BOOK                                   | \$11.63 |
| <br>   |         |
| MISSOURI HIKING TRAILS                                 | \$ 3.19 |
| WILD EDIBLES OF MISSOURI                               | \$ 5.84 |
| BUTTERFLIES & MOTHS OF MISSOURI                        | \$14.34 |
| FIELD GUIDE TO MISSOURI FERNS                          | \$ 3.72 |
| MISSOURI ORCHIDS                                       | \$ 4.25 |
| MISSOURI WILDFLOWERS                                   | \$ 9.03 |
| AMPHIBIANS & REPTILES OF MISSOURI                      | \$13.81 |

CHILDREN'S NATURE BOOKS:

|                                  |         |
|----------------------------------|---------|
| AMAZING WORLD OF ANIMALS         | \$ 2.66 |
| AMAZING WORLD OF PLANTS          | \$ 2.66 |
| WONDERS OF WATER                 | \$ 2.66 |
| WONDERS OF THE POND              | \$ 2.66 |
| DISCOVERING TREES                | \$ 2.66 |
| POD LIFE                         | \$ 4.20 |
| WHY DOES IT THUNDER & LIGHTNING? | \$ 4.20 |
| PEEK A BUG BOOK                  | \$ 4.24 |

ACTIVITY BOOKS:

|   |         |
|---|---------|
| CRAYOLA CRAYONS (16)                          | \$ 1.86 |
| AUDUBON COLORING BOOK, BIRDS OF AMERICA       | \$ 3.13 |
| SMALL ANIMALS NORTH AMERICA COLORING BOOK     | \$ 3.13 |
| AMERICAN WILDFLOWERS COLORING BOOK            | \$ 3.13 |
| COLORFOLD FOREST ANIMALS ACTIVE COLORING BOOK | \$ 4.78 |
| LITTLE ANIMAL STICKERS                        | \$ 1.06 |
| REPTILES FACTS 'N FUN (STICKERS)              | \$ 2.66 |
| PLAYFOLD BUTTERFLIES - MOBILE                 | \$ 4.78 |
| PLAYFOLD SONGBIRDS - MOBILE                   | \$ 4.78 |
| PLAYFOLD BIRDS OF PREY - MOBILE               | \$ 4.78 |
| PLAYFOLD WATERFOWL - MOBILE                   | \$ 4.78 |

CASSETTES:PRICE (INC. TAX)

|   |         |
|---|---------|
| ANIMAL CRACKERS - ANIMAL SONGS FOR AGES 3-11          | \$10.57 |
| NATURE NUTS - SCIENCE AND ECOLOGY SONGS FOR AGES 3-11 | \$10.57 |

SMOKEY ITEMS:

|                                    |         |
|------------------------------------|---------|
| SMOKEY: A SIMPLE COUNTRY BEAR BOOK | \$ 2.39 |
| SMOKEY BEAR KEY CHAIN              | \$ 1.59 |
| SMOKEY HAT "THINK, THANKS"         | \$ 7.43 |
| SMOKEY BEAR DOLL - 6 INCHES        | \$ 5.26 |
| SMOKEY BEAR DOLL - 12 INCHES       | \$15.88 |
| SMOKEY BEAR DOLL - 15 INCHES       | \$23.32 |
| SMOKEY BEAR DOLL - 30 INCHES       | \$74.30 |

WILDLIFE POSTERS:

|                      |         |
|----------------------|---------|
| COTTONTAIL RABBIT    | \$ 3.18 |
| BALD EAGLE           | \$ 3.18 |
| HORNED OWL           | \$ 3.18 |
| WHITE TAIL DEER      | \$ 3.18 |
| WOOD DUCKS           | \$ 3.18 |
| RING NECKED PHEASANT | \$ 3.18 |
| RUFFED GROUSE        | \$ 3.18 |
| WILD TURKEY          | \$ 3.18 |
| SMALLMOUTH BASS      | \$ 3.18 |
| WOOD DUCK IN FLIGHT  | \$ 3.18 |

NATURE NOTE CARDS:

|  |         |
|--|---------|
| WILDFLOWERS - 12 FOLDED NOTES & ENVELOPES                | \$ 2.66 |
| BLUE HERON - 8 FOLDED NOTES AND SEALERS, RECYCLED PAPER  | \$ 3.13 |
| HUMMINGBIRD - 8 FOLDED NOTES AND SEALERS, RECYCLED PAPER | \$ 3.13 |
| BARRED OWL - 8 FOLDED NOTES AND SEALERS, RECYCLED PAPER  | \$ 3.13 |
| WOOD DUCK - 8 FOLDED NOTES AND SEALERS, RECYCLED PAPER   | \$ 3.13 |

CEDAR CREEK RANGER DISTRICT ITEMS:

|                                     |         |
|-------------------------------------|---------|
| T-SHIRTS - SMALL TO EXTRA LARGE     | \$ 9.55 |
| T-SHIRTS - EXTRA EXTRA LARGE        | \$10.61 |
| SWEATSHIRTS - MEDIUM TO EXTRA LARGE | \$19.07 |
| SWEATSHIRTS - EXTRA EXTRA LARGE     | \$20.13 |
| CEDAR CREEK HATS (WINTER)           | \$ 7.43 |
| CEDAR CREEK HATS (SUMMER)           | \$ 7.43 |
| CEDAR CREEK PATCHES                 | \$ 2.66 |

CEDAR CREEK RANGER DISTRICT  
MARK TWAIN NATIONAL FOREST  
INTERPRETATION PLAN

The Cedar Creek Ranger District is located in Boone and Callaway Counties in central Missouri, within a triangle formed by the cities of Columbia, Jefferson City and Fulton. The District is comprised of 15,200 acres, is one of the larger areas of public land north of the Missouri River. In a transition zone between tall grass prairie and the oak-hickory forest of the Ozarks, the District contains a variety of habitats to explore and enjoy. Change has been the dominating force in the area not only in ownership but also in uses of the land and its people.

HISTORY

The lands within the District boundaries were all privately owned prior to 1937. However, intensive cultivation of farm lands caused severe depletion and erosion of the fragile soils and this area became the "lands nobody wanted". Then, in the early 1940's, the U.S. Soil Conservation Service purchased the land began rebuilding it by filling and stabilizing gullies, reseeding grasses and planting trees.

In 1953, these public lands were transferred to the Forest Service, U.S. Department of Agriculture, for administration and management. A Bill transferring the Purchase Unit into National Forest status was signed by President George Bush in November of 1992.

DISTRICT INTERPRETATION:

DISTRICT OFFICE - Since spring of 1991 the reception area has included an outlet of the Eastern National Forest Interpretive Association (ENFIA). The display includes over seventy items. Bulletin Board is located at the office entrance displaying a District Map and relevant seasonal information. Trail maps are also available.

"YOU ARE HERE" SIGNS - Located at thirty of the dispersed parking areas located throughout the District. Sign includes a District map with a "You are Here" arrow, a synopsis of regulations, a brief history of the District.

NATIVE GRASS CONVERSION - On three of the pastures located on the District "What's Happening Here" signage is used to explain differing methods used by the Forest Service to convert pasture to Native Warm Season Grasses.

Pasture 5-3 - "What's Happening Here" signage explains how restoration work is accomplished without chemicals or seedbed preparation, rather fire and grazing.

Round Prairie - "What's Happening Here" signage explains management on each side of the roadway. West side by use of fire and nature. East side through grazing, burning and mechanical components.

Courtney Tract - Area was originally restored as part of a study sponsored by the Missouri Department of Conservation and the University of Missouri to promote growth of warm season grasses in wildlife management. Two stands were originally in the study, the one here and another on MDC lands. The study was discontinued in the early 80's.

TIMBER MANAGEMENT - Due to the interest by urban dwellers in timber management methods sale are interpreted through the use of "What's Happening Here" signage.

"What's Happening Here" signage is currently in Compartment 18 at the sight of the Big Branch timber sale. In 1984 the District undertook an underplanting project to promote the growth of oak seedlings, which were not competing well with the understory maple shading them out. In September the understory maples were girdled or cut and sprayed with Tordon 10R herbicide on about 2 acres. The following April, 3-year-old red oak seedlings were planted. The seedlings were provided by the North Central Experiment Station located in Columbia. The overstory was removed using an uneven-aged timber sale in 1990.

TIMBER BRIDGE - A sign was designed using the blueprint for the stress-laminated timber bridge constructed in cooperation with the State and Private Forestry, the Missouri Department of Conservation, Callaway County Court, University of Missouri School of Forestry, Fisheries and Wildlife; Callaway County Extension Council and Wheeler Consolidated Incorporated. The new bridge replaces an 84-year old, single land steel truss bridge that crosses Hiller's Creek as part of the FS timber bridge initiative.

#### RECREATION AREAS -

Carrington Pits: developed picnic and fishing area resulting from coal strip mining in the early 1900's by the Callaway Coal Company which sent the coal to Jefferson City and Mexico Missouri. In the 30's the CCC planted a number of plantations including eastern red cedar, burr oak, and shortleaf pine in a reclamation effort. The area has been used by local residents years before the FS took over its management.

Another reclamation effort in 1990 headed by the Missouri DNR removed mine tailings from the area.

A Challenge Cost Share project with a local historian was completed in 1992 and plans are underway to interpret the area.

Pine Ridge: developed picnic, camping and trailhead that was also planted by the CCC with shortleaf pine. It had been a farm, field and apple orchard. An oral history of the area is known but no interpretation has been completed.

Dry Fork: site of future developed campground and trailhead which border the Cedar Creek trail a homeplace and cemetery in the area will be interpreted as information is found.

#### TRAIL SYSTEM -

Moon Loop: structures located on the loop that even District folks aren't sure of along with erosion scars left from the 30's which give the area its moonscape look.

#### Rutherford Bridge -

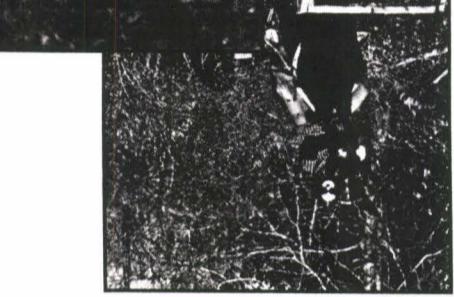
Abandoned steel structure which was modified as an Eagle Scout project in 1970s so that Cedar Creek could be crossed by hikers and bicyclists.

Nevins Homestead: farm of a Black homesteading family (freed slaves), area has been interpreted through the research of local historian and family members. House and barn are still standing and other features of the farm are shown on a map of the area.

Folsum Area: site of a community that "disappeared" located along the southern loop of the trail and needs research.

#### OTHER:

Research the Chicago and Alton Railroad which traversed the District.



## Ranger District Cedar Creek

Mark Twain National Forest

## Welcome to the Cedar Creek Ranger District

Located in the transition zone where the oak-hickory forest joins the tall grass prairie, the Cedar Creek District of the Mark Twain National Forest provides a variety of recreational experiences, wildlife habitats, and is one of the largest areas of public land north of the Missouri River.

Lands that make up the Cedar Creek Ranger District were all privately owned prior to 1937. Intensive cultivation caused severe depletion and erosion of fragile soils. The area became land nobody wanted. In the early 1940's, the U.S. Soil Conservation Service purchased the land and began rebuilding it by filling and stabilizing eroded gullies, reseeding grasses and planting trees.

In 1953, the land was transferred to the Forest Service, U.S. Department of Agriculture, for administration and management. The Forest Service is dedicated to the principle of multiple use management of the nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation.

With approximately 15,000 acres in Boone and Callaway counties, Cedar Creek District lies within a triangle formed by Columbia, Jefferson City, and Fulton, Missouri. Come explore and enjoy your National Forest.

### RECREATION

The Cedar Creek District provides a variety of recreation activities, including hiking, riding, camping and hunting. Forest visitors should know that privately owned lands are mingled with the National Forest System lands.

The District Office is an outlet for the Eastern National Forest Interpretive Association and has a variety of field identification books available for sale.

The Mark Twain National Forest has a **PACK IT IN - PACK IT OUT** policy. This means that you should take out all of your garbage, including can flip tops and candy bar wrappers, and dispose of it properly. Please leave the area looking better than you found it.

314-642-6726 (TT)  
4965 County Road 304  
Fulton, MO 65251  
MAILING ADDRESS  
1403 Airport Road  
Cedar Creek Ranger District  
United States  
Department of  
Agriculture  
Mark Twain  
Forest Service  
National Forest



The policy of the United States Department of Agriculture, Forest Service, is to protect all live plants and trees from injury or destruction. The forest offers many opportunities to gather berries, fruits, nuts, and mushrooms. Please protect all live plants and trees from injury or destruction.

Any Forest Service related activity should write to: Chief, Forest Service, USDA, Washington, DC 20250. Persons believing they have been discriminated against in any Forest Service activity should write to: Chief, Forest Service, National Office, Age, Religion, Sex or Disability, of race, color, national origin, age, religion, sex or disability. Forest Service prohibits discrimination on the basis of race, color, national origin, age, religion, sex or disability.

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### Gathering Wild Edibles

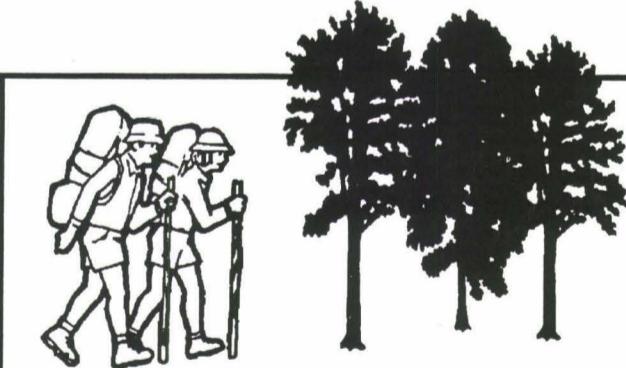
The trail system is available for ORV and ATV use. This includes cross-country travel to ORV and ATV use. All other national forest lands are closed and restricted. All county roads subject to state and local laws federal, state, or county roads subject to use are any ATVs, tracked vehicles, etc., are welcome to use any and carry all, 2 and 3 wheel motorcycles, 4-wheel drive and all-terrain and off-road vehicles (4x4 pickups, jeeps

### Off-Road Vehicle Use

Canoes float tips are possible on Cedar Creek when spring run-off is occurring. Access points can be found where public roads cross the Creek. Most of the creek banks are private land, so respect the rights of the private land owners.

### Canoeing

Camoe float tips are possible on Cedar Creek when



### Cedar Creek Trail System

The original Cedar Creek Hiking Trail, the southern loop, crosses approximately 22 miles of scenic country. About two-thirds of this trail is cross-country and the other third is on gravel county roads. Private lands are mingled with the national forest lands, so take care not to trespass!

The trail is open to hikers, mountain bicyclists and horseback riders except for two areas. A short section of trail in the Smith Creek area east of Rutherford Bridge and the section of trail through Pine Ridge Recreation Area are open to hiking and mountain bicycling only. Alternate trails are provided for horseback riders in these areas.

Grey diamonds mark the trail route and self-closing gates provide places to cross the fences of pasture areas. Please do not cut any fences. Small graveled areas, located at each national forest tract, provide space for parking.

The northern two sections of the trail are called the Moon and Smith Creek loops.

Hunting is allowed on all Forest Service lands, in accordance with State game regulations. Remember that private lands are mingled with public lands. Discharge of firearms in or within 150 yards of a residence, building, campsite, developed recreation site, or occupied area is not allowed.

Hunting is allowed on all Forest Service lands, in accordance with State game regulations. Remember that private lands are mingled with public lands. Discharge of firearms in or within 150 yards of a residence, building, campsite, developed recreation site, or occupied area is not allowed.

Fishing seasons, methods, size limits, and daily possession limits for fishing on the district. MDC fishing regulations apply in regard to the Forest. MDC regulations and manages sport fishing on the nation (MDC) regulation. The Missouri Department of Conservation (MDC) manages the Missouri habitat office. Although the Forest Service manages habitat in the National Forest, the Missouri Department of Conservation (MDC) manages the Missouri habitat office. Although the Forest Service manages habitat in the National Forest, the Missouri Department of Conservation (MDC) manages the Missouri habitat office.

Cedar Creek, Middle River, the Cartington Pits, and Blue Hill, and channel crafts. Many ponds support fish populations. Most of the ponds were originally farm ponds and have been stocked in the past and probably contain populations of large mouth bass, bluegill, and channel crafts.

**Fishing**

If you prefer a more primitive setting without facilities, you can camp and picnic anywhere on National Forest lands. Please take care to not trespass onto private lands, keep fires contained, and pack out all your trash.

Round Prairie offers a native prairie experience, surrounded by over 140 acres of warm-season grasses and forbs. Establisched by the Forest Service to benefit wildlife and provide summer forage the site contains an old home place and trail system. Picnic tables and a fire ring are the only facilities available.

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The Moon covers almost 7 miles in northwest part of the District and is named for its' eroded landscape features which resemble the surface of the moon. This area was purchased by the Soil Conservation Service in the 1930's. Much of this land has been reclaimed over the years by private landowners and the government but some of the moon-like features can still be seen today.

Smith Creek loop traverses about 1500 acres of non-motorized semi-primitive area and is about 5 miles in length. This area lies between Hwy J and Cedar Creek from Boydsville to Rutherford Bridge.

Soils in this area are subject to erosion so it is important that all trail users stay on marked and maintained trails to avoid further resource and property damage. One section of trail is closed to horseback riding but an alternative trail is provided for horseback riders.

This area is not only very popular for trail users but is used by hunters during spring and fall hunting seasons. Special care should be taken when using the trail during hunting seasons.

These two trail sections were constructed with the help of the Cedar Creek Trails Coalition, a group of hiking, bicycling and horseback riding organizations and individuals interested in improving the trail system on the District.

If you are interested in working on trail development or maintenance or have comments about recreational facilities on the Cedar Creek District contact the District Ranger.

Scale  
1/2

- Purchase Unit Boundary
- Baskett Wildlife Area Boundary
- All Users
- Hiking/Biking Only
- Trailhead Location
- Public Parking Area
- Point of Interest
- Miles Counter Clockwise  
and Clockwise From Pine Ridge

## POINTS OF INTEREST

Pine Ridge Recreation Area is situated in a pine grove planted in the 1930's by the Civilian Conservation Corps. This area provides opportunities to camp, picnic and access the Cedar Creek trail system by foot or bicycle. The facility is located 2.5 miles west of Guthrie, Missouri, on Route Y. Tables, grills, fire-rings, drinking water, tent pads, and a vault toilet are available. Two spurs offer adequate space for camping trailers, but there are no hook-ups for water, electricity or sewage. No fees are charged.

Nevins Homestead consists of two buildings from the original Nevins homestead. Information about the family and history of the site is located near the house. The homestead is located about one mile north of Pine Ridge Recreation Area.

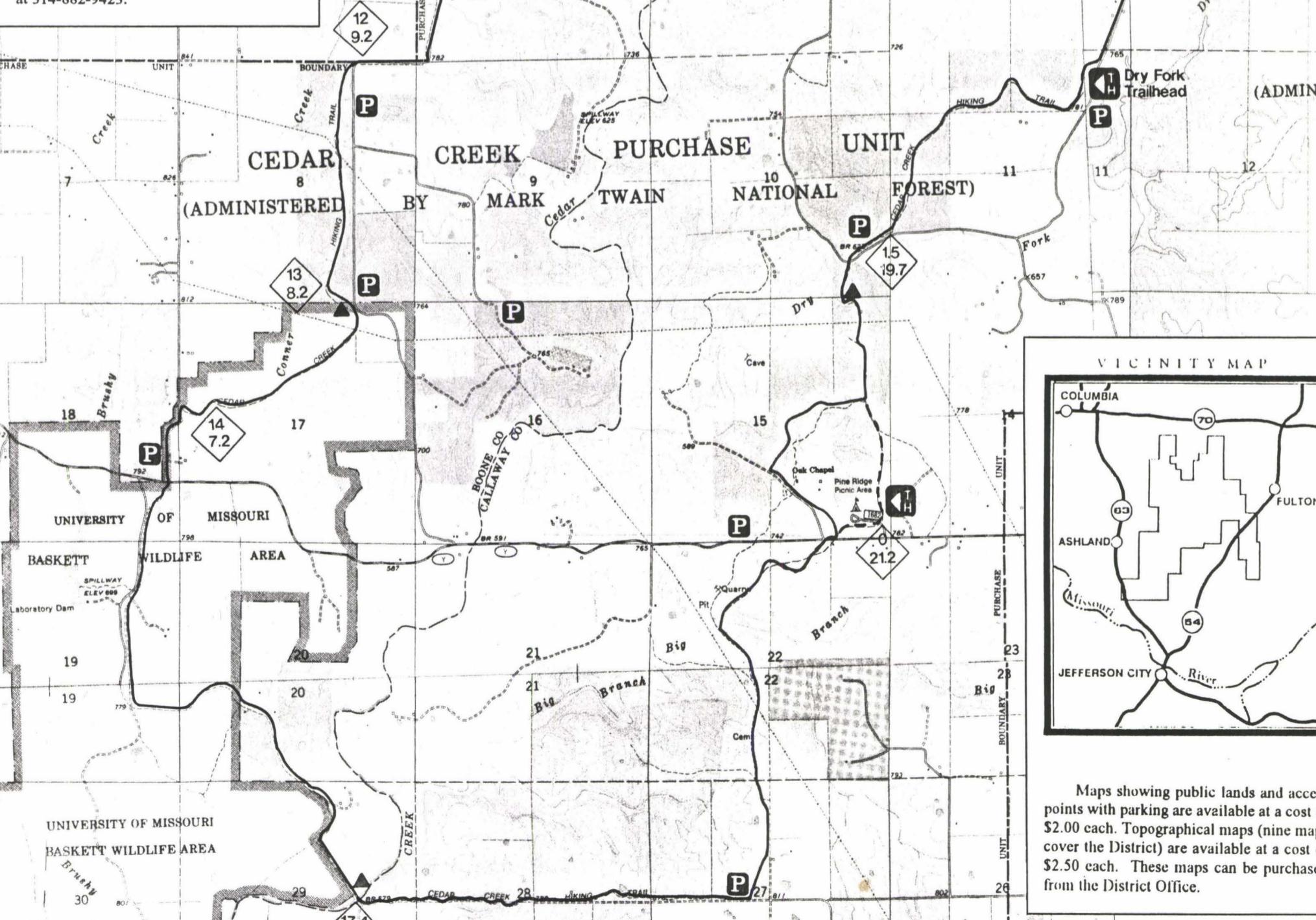
Dry Fork Trailhead is situated in an old field with scattered, large shade trees and shrubs. Take Route J to county Road #356 and go 1.25 miles west to Paris Fork Church, turn south and go about 1 mile on County Road #361. Facilities available include a gravel parking area, picnic tables, and grills. A campground which will accommodate horses is planned for the future across the road from the present trailhead.

Boydville Site is tucked in the oak-hickory woods 1 mile west of Route J on County Road #353, near Boydville, Missouri. The site adjoins the popular hunting, hiking and riding area called Smith Creek, which is managed as a walk in area. No motorized vehicles are allowed.

Rutherford Bridge is an old steel structure that was used to cross Cedar Creek between Callaway and Boone counties until it was abandoned. In 1983, Boy Scouts from both Callaway and Boone counties constructed a foot bridge utilizing the skeleton of the original bridge as a Eagle Scout project.

Devil's Backbone, a narrow ridge located on private land, is not accessible by the trail users.

Thomas S. Baskett Wildlife Research Center is under the management of the University of Missouri in Columbia. We ask all trail users to PLEASE stay on the developed trail while passing through this area as research is ongoing. Camping, hunting, fishing and pets are not permitted in the area. For more information contact Dr. Ernie Wiggers at 314-882-9423.



Maps showing public lands and access points with parking are available at a cost of \$2.00 each. Topographical maps (nine maps cover the District) are available at a cost of \$2.50 each. These maps can be purchased from the District Office.



## What Is ENFIA?

In the early 1980's the USDA Forest Service renewed its interest in the formation of non-profit cooperating associations to assist the agency with interpretive and educational programs.

As a result of this interest the Eastern National Forests Interpretive Association (ENFIA) was formed as a non-profit cooperating association operating in regions 8 and 9 of the USDA Forest Service. ENFIA promotes the historical, scientific and educational activities of the forest service through the sale of interpretive material.

ENFIA acts as an umbrella organization composed of Affiliates and Branches. An Affiliate is incorporated and governed by its own Board of Directors. Branches are National Forests that have sales outlets but no formal incorporated interpretive association and are governed by the ENFIA Board of Directors.

Affiliates and Branches contract with ENFIA to supply interpretive material such as books, publications and related material to be retailed to the forest visitor. ENFIA returns a minimum of 10% of gross sales to each outlet to be used for expansion, visitor information and/or interpretive services.

For additional information on the organization please contact:

**EASTERN NATIONAL FORESTS  
INTERPRETIVE ASSOCIATION**  
P. O. Box 70  
E. Tawas, MI 48730  
(517) 362-7511

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Eastern National Forests  
Interpretive Association

P.O. BOX 70 • EAST TAWAS, MICHIGAN 48730



# Eastern National Forests Interpretive Association



**PARTNERS WITH THE NATIONAL FORESTS**  
in providing information  
and educational materials to the  
forest visitor



# Eastern National Forests Interpretive Association

## AFFILIATES

### Huron-Manistee Interpretive Association

#### HURON-MANISTEE NATIONAL FOREST

421 S. Mitchell St.  
Cadillac, MI 49601

Baldwin Ranger District  
Cadillac Ranger District  
Harrisville Ranger District  
Lumbermans Monument Visitor Center  
Manistee Ranger District  
Mio Ranger District  
Tawas Ranger District  
White Cloud Ranger District

### Mid-Appalachian Interpretive Association

#### GEORGE WASHINGTON NATIONAL FOREST

P. O. Box 233, Harrison Plaza  
Harrisonburg, VA 22801

Lee Ranger District  
Massanutton Visitor Center  
Elizabeth Furnace Cabin  
George Washington National Forest Hdq.  
Deerfield Ranger District  
James River Ranger District  
Dry River Ranger District  
Pedlar Ranger District  
Sherando Lake Recreation Area  
Warm Springs Ranger District  
Trout Pond Recreation Area  
Bolar Mt. (Lake Moomaw) Rec. Area

#### MONONGEHALA NATIONAL FOREST

200 Sycamore St.  
Elkins, WV 26241-3962

Seneca Rocks Visitor Center  
Cranberry Mountain Visitor Center  
Monongahala National Forest Hdq.  
Elkins Area Chamber of Commerce

### STATE AND PRIVATE FORESTRY

#### GREY TOWERS NATIONAL HISTORIC LANDMARK

P. O. Box 188  
Milford, PA 18337



## BRANCHES

#### ALLEGHENY NATIONAL FOREST

222 Liberty St.  
Warren, PA 16365

Allegheny National Forest Hdq.  
Kinzua Point Information Center  
Bradford Ranger District  
Marienville Ranger District  
Sheffield Ranger District  
Ridgway Ranger District

#### CHEQUAMEGON NATIONAL FOREST

1170 Fourth Ave. S.  
Park Falls, WI 54552

Chequamegon National Forest Hdq.  
Hayward Ranger District  
Glidden Ranger District  
Medford Ranger District

#### DANIEL BOONE NATIONAL FOREST

100 Vaught Rd.  
Winchester, KY 40391

Daniel Boone National Forest Hdq.  
Stanton Ranger District  
Zilpo Recreation Area

#### GREEN MOUNTAIN NATIONAL FOREST

Federal Bldg., P. O. Box 519  
Rutland, VT 05701-0519

Manchester Ranger District  
Middlebury Ranger District  
Rochester Ranger District

#### HIAWATHA NATIONAL FOREST

2727 N. Lincoln Rd.  
Escanaba, MI 49829

Munising Ranger District  
Rapid River Ranger District  
St. Ignace Ranger District

#### MARK TWAIN NATIONAL FOREST

401 Fairgrounds Rd.  
Rolla, MO 65401

Cedar Creek Ranger District

#### OTTAWA NATIONAL FOREST

21 E. Cloverland Dr.  
Ironwood, MI 49938

Sylvania Visitor Center  
Watersmeet Ranger District

#### WAYNE-HOOSIER NATIONAL FOREST

811 Constitution Ave.  
Bedford, IN 47421

Wayne-Hoosier National Forest Hdq.  
Marietta Unit Office

# PINERIDGE RECREATION AREA



PRIVATE

HILLING  
TRAIL

FINE  
PLANTATION

LEAD CO.  
1966

MANUFACTURED  
BY THE  
LEAD CO.

TOILET

TOILET

TOILET

HILLING  
TRAIL

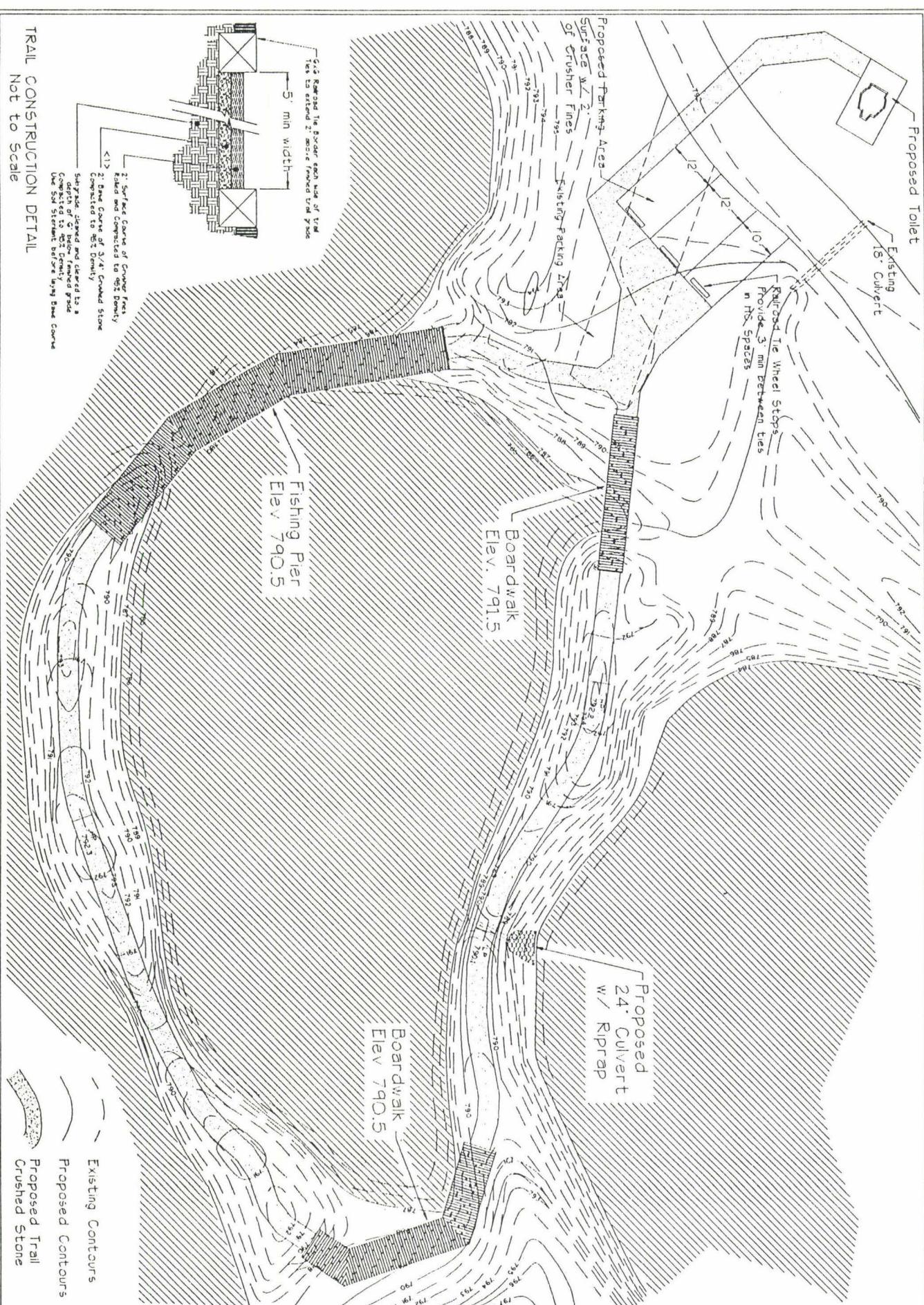
PROMOTE SMALL TREES, SHRUBS  
GRASSED FORDS IN ROW

RURAL PRESSURE WATER LINE

STATE HIGHWAY 17

TO GUTHIERIE  
2 MILES

PRIVATE



U.S. DEPARTMENT OF AGRICULTURE  
MARK TWAIN NATIONAL FOREST  
THE EASTERN REGION

## CARRINGTON PITS Grading Plan

|             |             |      |          |
|-------------|-------------|------|----------|
| DRAWN BY    | L. J. Watts | DATE | 09/30/92 |
| DESIGNED BY | L. J. Watts | DATE | 09/30/92 |
| CHECKED BY  |             | DATE |          |
| REVIEWED BY |             | DATE |          |

© 2014 - 4"

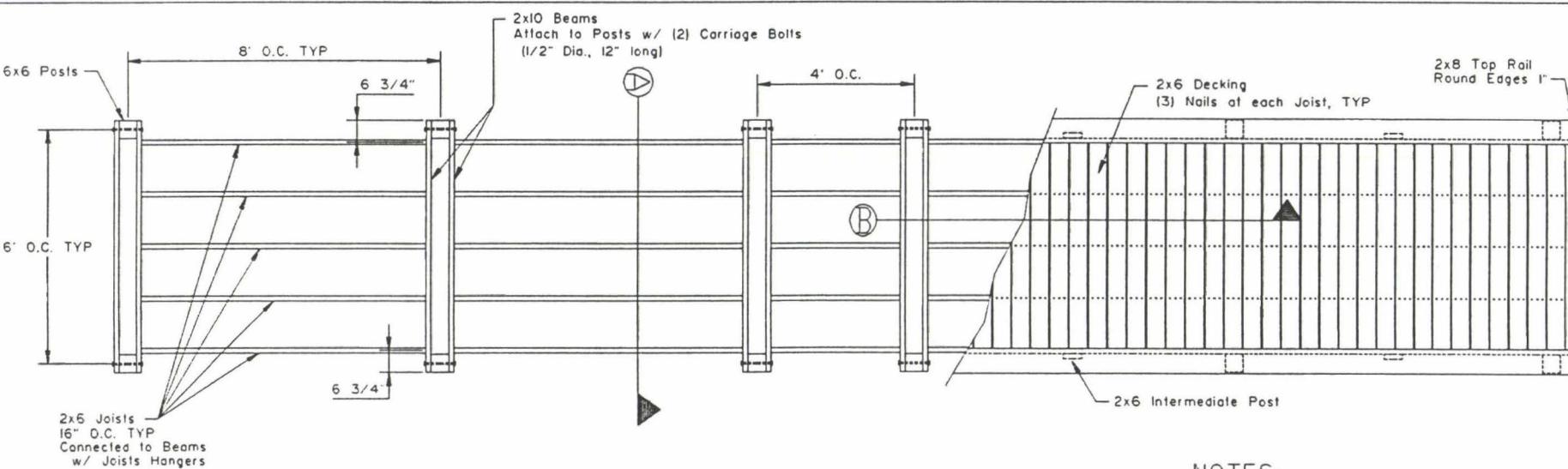
Scale: 1 :

|   |      |      |
|---|------|------|
| REVISIONS                               | NAME | DATE |
| <1>Base was 4", RR ties 6x8 LJW 3/12/93 |      |      |

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## DRY FORK TRAILHEAD

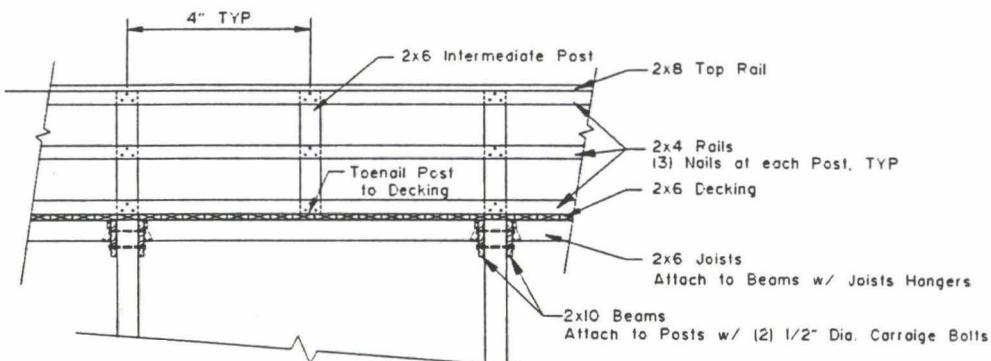
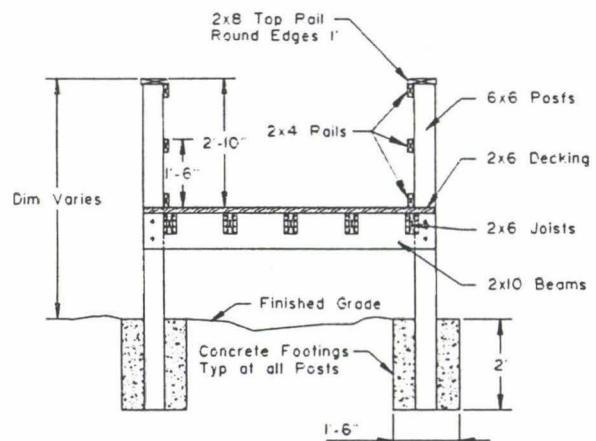




## Framing Plan

### NOTES:

1. All lumber to be CCA treated Southern Yellow Pine.
2. All fasteners and hardware to be hot-dipped galvanized.



Section A

Section B

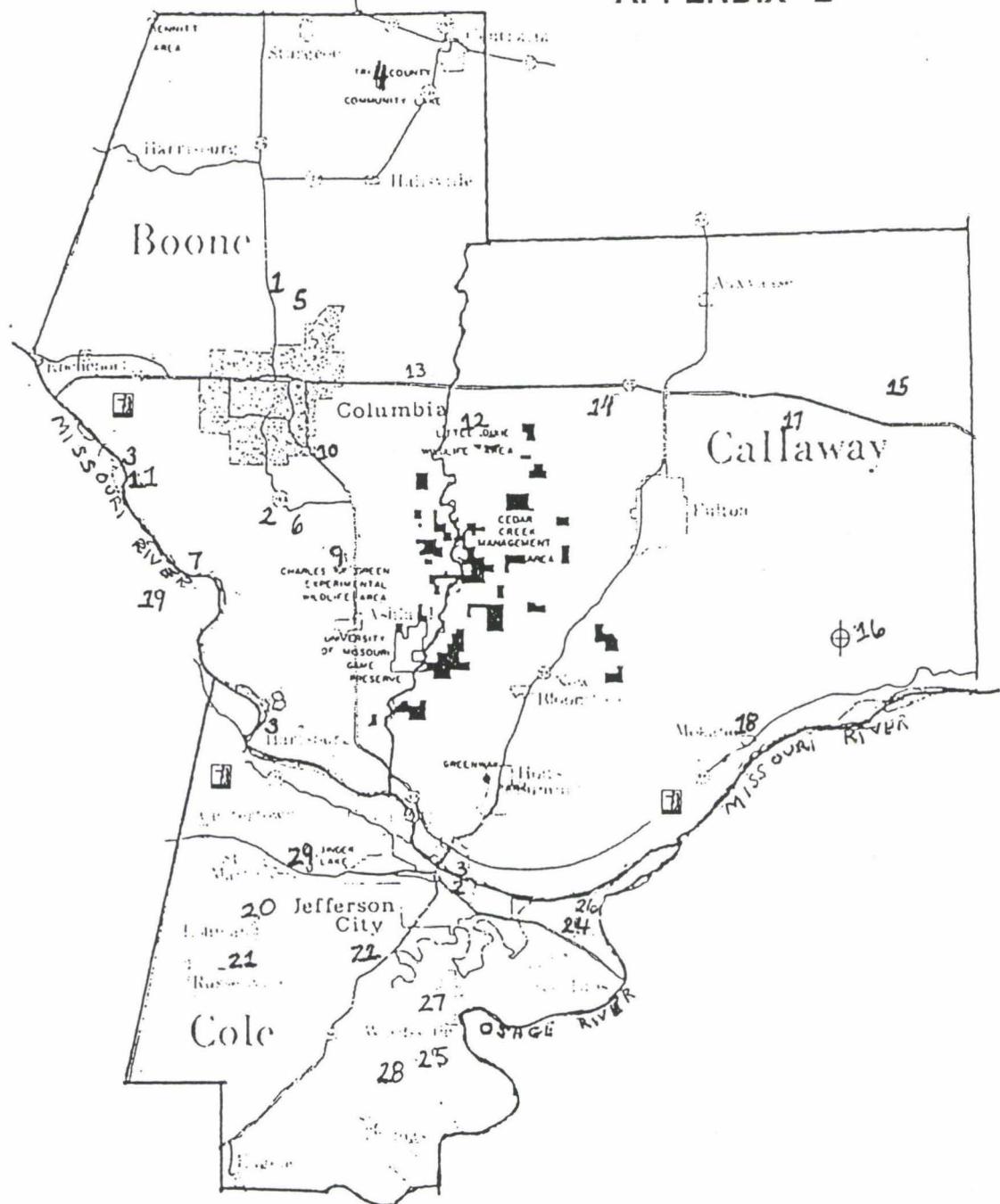
### Carrington Pits Boardwalk A Construction Details

U.S. DEPARTMENT OF AGRICULTURE  
MARK TWAIN NATIONAL FOREST  
THE EASTERN REGION

|                     |             |
|---------------------|-------------|
| DRAWN BY L.Watts    | DATE 3/5/93 |
| DESIGNED BY L.Watts | DATE 3/5/93 |
| CHECKED BY          | DATE        |
| REVIEWED BY         | DATE        |



# APPENDIX E



## RECREATION AREAS

|                    |     |                       |     |                     |     |
|--------------------|-----|-----------------------|-----|---------------------|-----|
| 1. Finger Lakes SP | DNR | 11. Eagle Bluff WA    | MDC | 21. Scrivner Lake   | MDC |
| 2. Rock Bridge SP  | DNR | 12. Little Dixie Lake | MDC | 22. Honey Crk Acc   | MDC |
| 3. Katy Trail SP   | DNR | 13. Rod & Gun Club    | PVT | 23. Moreau 50 Acc   | MDC |
| 4. Tri-City Lake   | MDC | 14. Crooked Creek     | PVT | 24. Mari-Oza Acc    | MDC |
| 5. Rocky Fork Lake | MDC | 15. Whetstone WA      | MDC | 25. Urb's Place     | PVT |
| 6. Three Creeks SF | MDC | 16. Reform WA         | MDC | 26. Mar-i-Oza Delta | PVT |
| 7. Providence Acc  | MDC | 17. Moore's Mill Acc  | MDC | 27. Pikes Camp Acc  | MDC |
| 8. Hartsburg Acc   | MDC | 18. Mokane Acc        | MDC | 28. St. Thomas Acc  | MDC |
| 9. Green WA        | MDC | 19. Marion Acc        | MDC | 29. Binder Lake     | MDC |
| 10. Waters WA      | MDC | 20. Stringtown Acc    | MDC |                     |     |

■ Cedar Creek RD

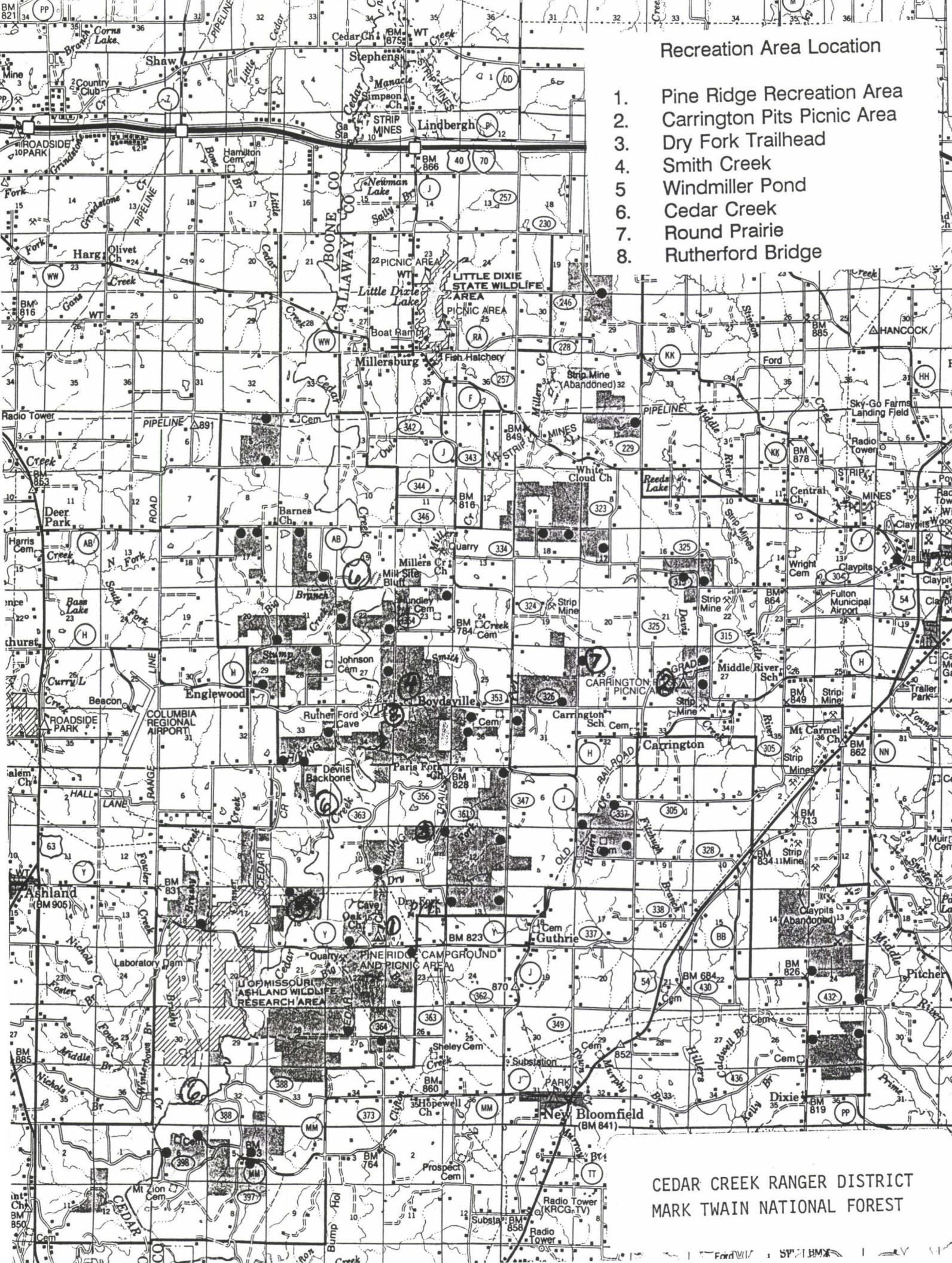
FS

■ Lewis & Clark Trl

MHTD

□ Basket Area

UM



## Recreation Area Location

1. Pine Ridge Recreation Area
2. Carrington Pits Picnic Area
3. Dry Fork Trailhead
4. Smith Creek
5. Windmiller Pond
6. Cedar Creek
7. Round Prairie
8. Rutherford Bridge

CEDAR CREEK RANGER DISTRICT  
MARK TWAIN NATIONAL FOREST

## APPENDIX F

### MARK TWAIN NF (CEDAR CREEK) MO 9TH DISTRICT 866 ACRES \$681,000

The Cedar Creek Project is located in Boone and Callaway Counties in north central Missouri, within a triangle formed by the cities of Columbia (home of the largest campus of the University of Missouri), Jefferson City (the State Capital and home of Lincoln University) and Fulton (the home of William Woods College and Westminster College - site of Winston Churchill's famous "Iron Curtain" speech).

With approximately 15,000 acres of National Forest System lands, the project is one of the larger areas of public land north of the Missouri River and therefore receives a great deal of public recreation use. While much of this use is from the more than 200,000 people living within a 30 minute drive of the project, a considerable portion comes from St. Louis and Kansas City. The project is situated about half way between these two major metropolitan areas on Interstate Highway 70, making Cedar Creek an easy 2-hour drive for over 2.5 million people.

This accessibility, however, also creates higher rural residence and recreation residence development pressures within the project. Tracts that consolidate or expand existing National Forest System lands within the project, such as the four shown here (and others that will be coming on the market in the future) are critically needed to meet the increasing recreation usage of this populous area.

CC #1 - 618 acres - Acquisition of this large tract would consolidate public ownership in a popular, dispersed recreation area. A lengthy portion of the 35 mile Cedar Creek Hiking Trail, which accommodates hiking, bicycling, and horse riding, could be moved from its present location on a gravel county road to this tract, thereby greatly improving the recreation experience. The elimination of the 3.25 miles of land line would reduce FS administrative costs. The tract has 30 small ponds, 2 lakes (one 12 acres and one 8 acres), about 1 mile of perennial stream, and several areas of warm season grasses, all of which provide valuable wildlife habitat.

Boone County is experiencing rapid population growth and development inside the Cedar Creek Purchase Unit boundaries. Large, undeveloped tracts such as this one are very rare. Tracts adjacent to National Forest are highly desirable for residential property, so this acquisition should not be postponed.

CC #2 - 77 acres - This tract lies within the largest contiguous area of National Forest System land in Boone County. Acquisition would enhance recreation opportunities and reduce the FS administrative costs due to consolidation. Also, the prairie soils of the tract could be managed to enhance the wildlife habitat of openland species, such as upland plover, bobwhite quail, and Henslow's sparrow.

(MORE)

This area is experiencing rapid population growth and development. Tracts adjacent to National Forest are highly desirable for residential property, so this acquisition should not be postponed.

*Acquired  
FY '92*

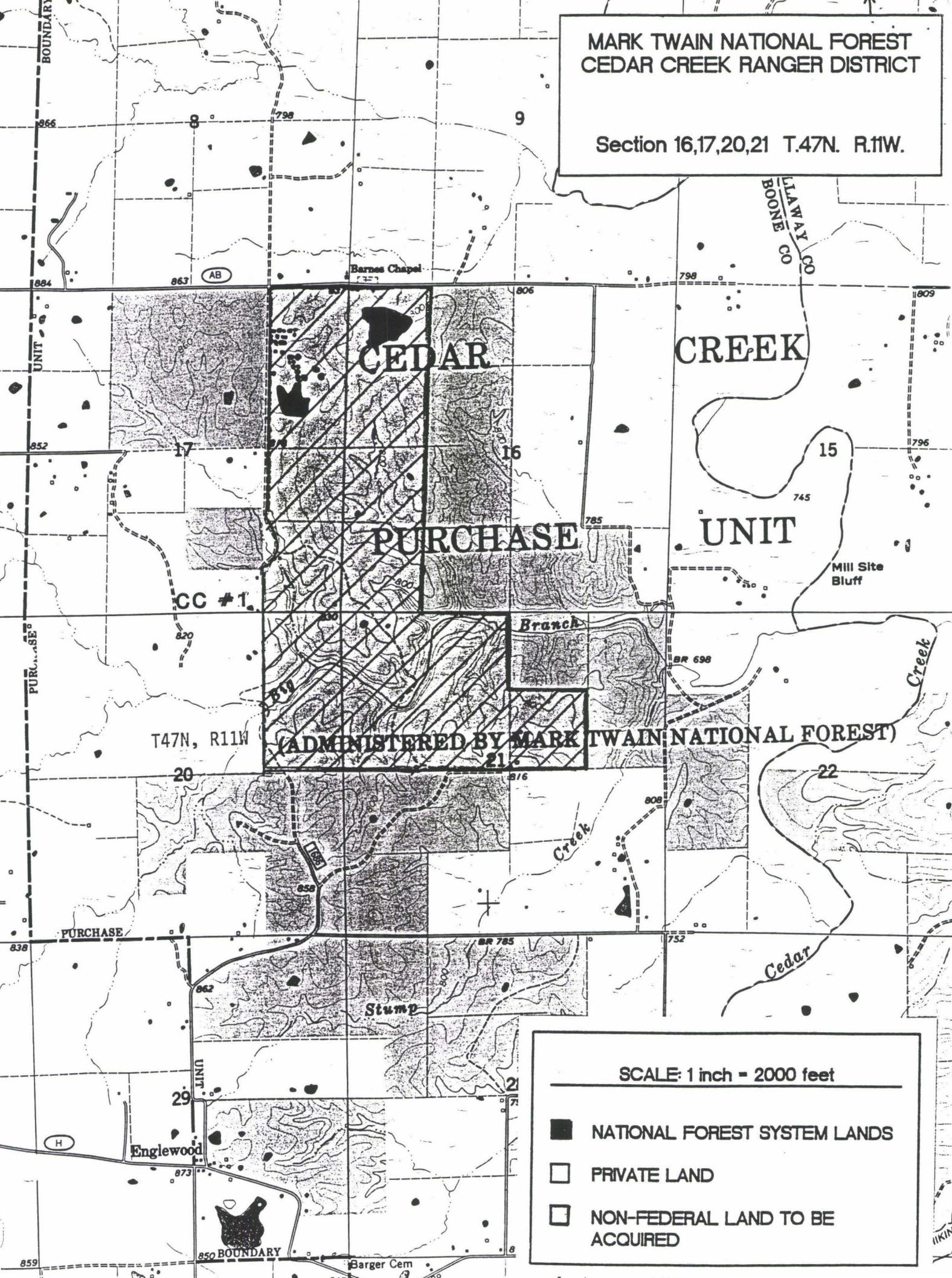
CC #3 - 80 acres - The tract lies within Cedar Creek District's only semi-primitive, non-motorized area. Surrounded by National Forest System land, the tract can be accessed by an old county road that has been abandoned but not vacated. The tract has been divided into 10-acre parcels which are currently being offered for sale for recreation and residential purposes.

Acquisition will consolidate public ownership and enhance the recreation opportunities in this heavily used hiking, horse riding, and mountain bicycling area. The District is experiencing rapid population growth and development inside its boundaries. Tracts surrounded by National Forest System land are highly desirable for residential property, so this acquisition should not be postponed.

CC #4 - 91 acres - The tract adjoins Cedar Creek (a candidate National Recreation River) and National Forest System lands. Acquisition would increase and consolidate public ownership in a heavily used dispersed recreation area. The Cedar Creek District is experiencing rapid population growth and development. Tracts which adjoin Cedar Creek and National Forest System land are highly desirable for residential property, so this acquisition should not be postponed.

MARK TWAIN NATIONAL FOREST  
CEDAR CREEK RANGER DISTRICT

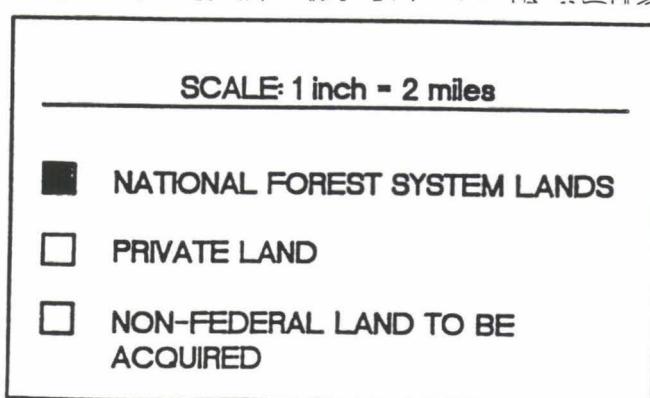
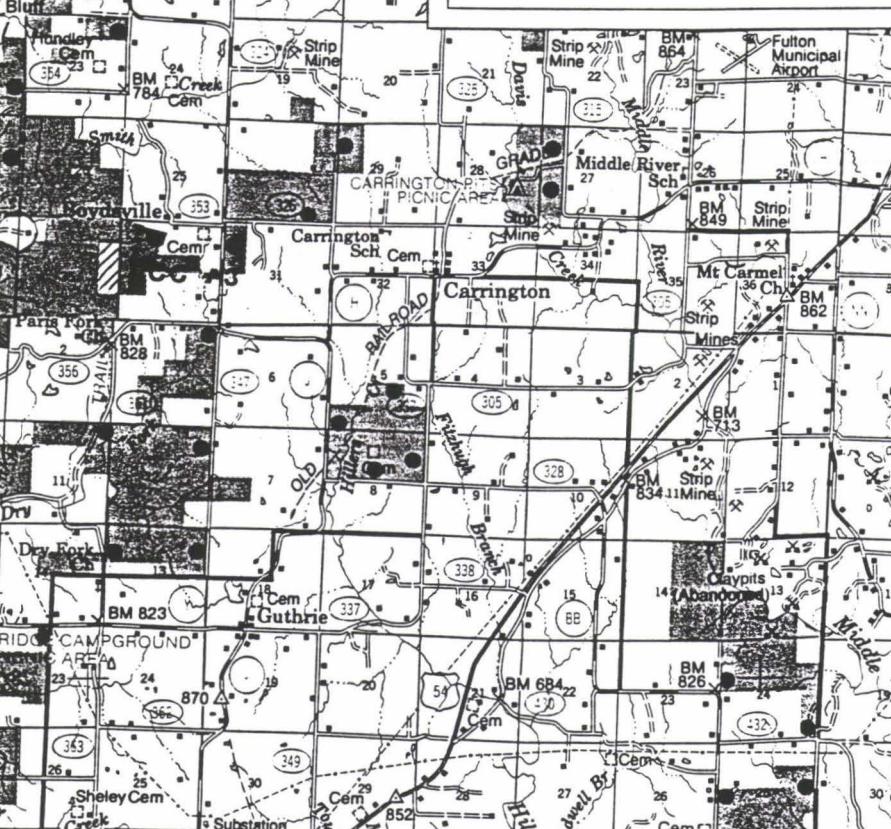
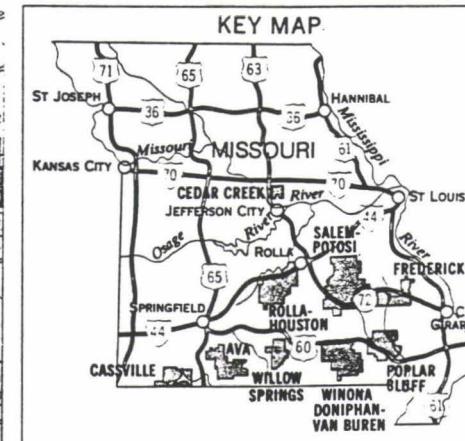
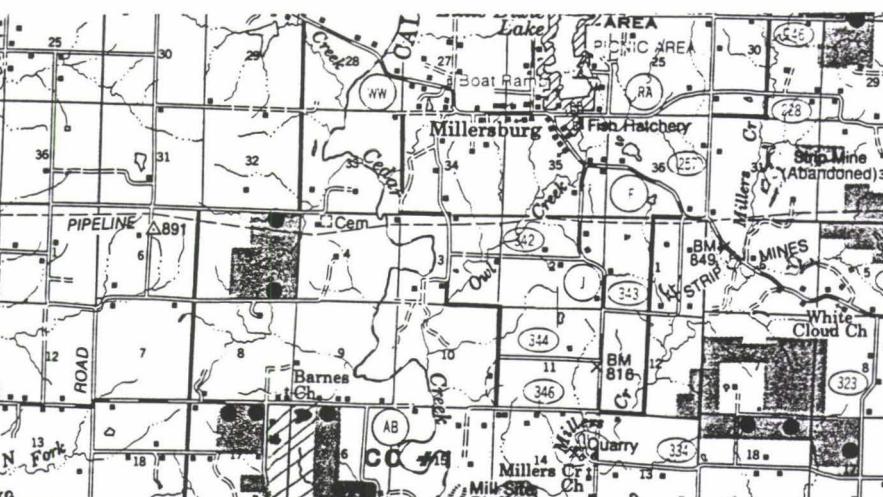
Section 16,17,20,21 T.47N. R.11W.



SCALE: 1 inch = 2000 feet

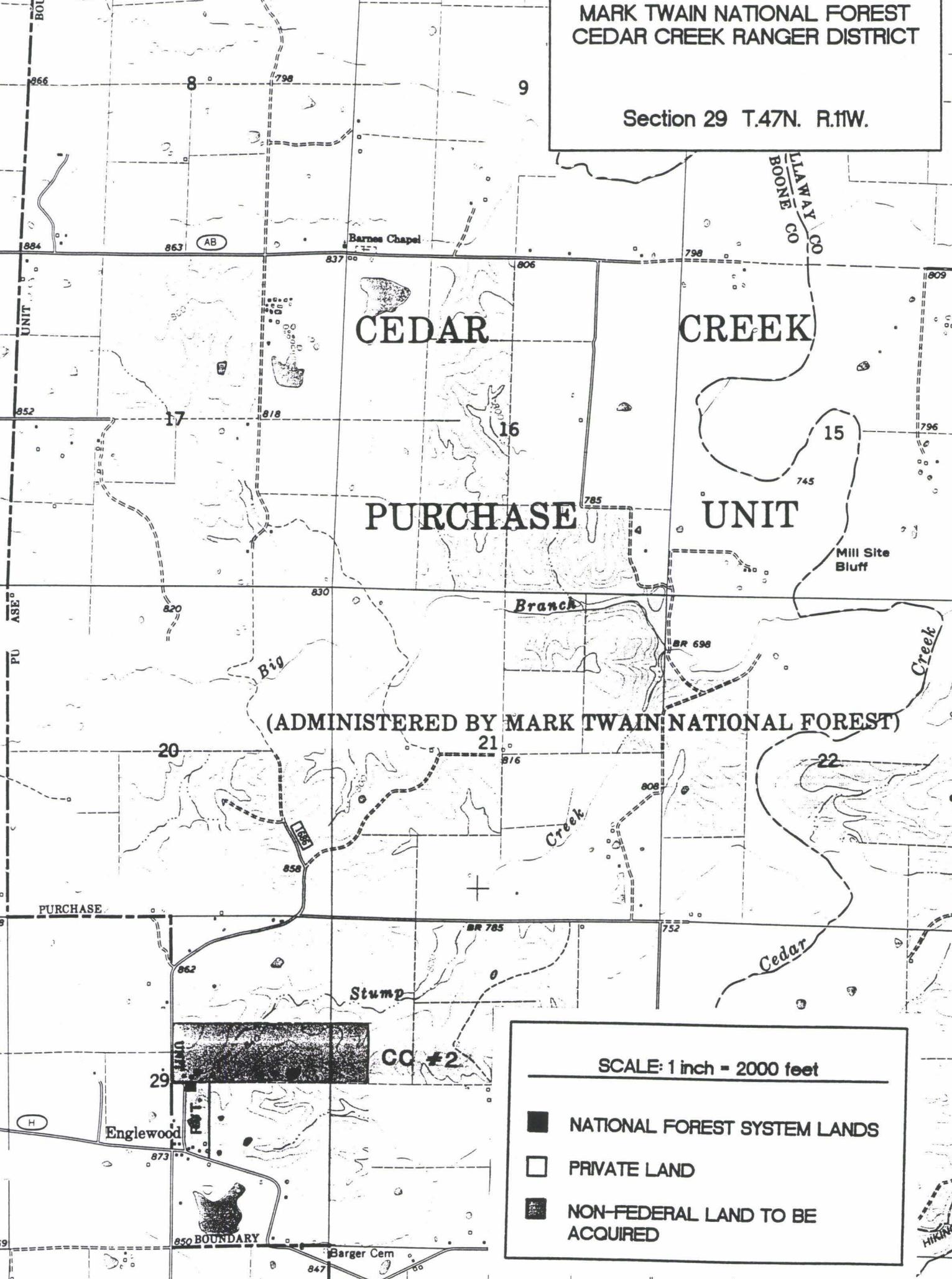
- NATIONAL FOREST SYSTEM LANDS
- PRIVATE LAND
- ▨ NON-FEDERAL LAND TO BE ACQUIRED

MARK TWAIN NATIONAL FOREST  
CEDAR CREEK RANGER DISTRICT  
MISSOURI  
(CEDAR CREEK PROJECT)



MARK TWAIN NATIONAL FOREST  
CEDAR CREEK RANGER DISTRICT

Section 29 T.47N. R.11W.



MARK TWAIN NATIONAL FOREST  
CEDAR CREEK RANGER DISTRICT

Section 35 T.47N. R.11W.

837

1960-1961

24

Smith

785

7

79/ 25

— 1 —

Cem

• **100% SATISFACTION GUARANTEED**

SCALE: 1 inch = 2000 ft

## NATIONAL FOREST SYSTEM

## PRIVATE LAND

## ACQUIRED

1961

UNIVERSITY OF MISSOURI  
ASHLAND WILDLIFE AREA

**MARK TWAIN NATIONAL FOREST  
CEDAR CREEK RANGER DISTRICT**

Section 31 T.46N. R.11W.

# CEDAR

# CREEK

T46N, R11W

CC #4

(ADMINISTERED BY MARK TWAIN NATIONAL FOREST)

SCALE: 1 inch = 2000 feet

- NATIONAL FOREST SYSTEM LANDS
- PRIVATE LAND
- NON-FEDERAL LAND TO BE ACQUIRED

## APPENDIX G

### LIST OF FACILITIES DEVELOPMENT AND ENHANCEMENT WITH COST ESTIMATES

**Pine Ridge Recreation Area:** continue to manage as picnic area, trailhead and campground.

|   |          |
|---|----------|
| Upgrade facility to barrier free:                                 | \$20,000 |
| (pave access roads, walkways to picnic tables, and camping spurs) |          |
| replace vault toilets with flush type:                            | \$15,000 |
| add security lights:  | \$ 1,000 |
| electrify some campsites:   | \$ 5,000 |
| build campground host site:                                       | \$ 1,000 |
| incorporate trail section to 36" wide loop around area            | \$ 2,500 |
| survey area for campground expansion:                             | \$ 5,000 |
| (planned during IRM step 2 analysis)                              |          |
| construct new campground loop:                                    | \$60,000 |

**Carrington Pits Picnic Area:** continue to manage as picnic and fishing area.

|  |            |
|--|------------|
| Continue with plans for barrier free fishing:        | \$12,000 D |
| replace vault toilet:                                | \$ 2,500 F |
| reconstruction of entrance road:                     | \$15,000 D |
| interpret coal mining operation:                     | \$ 2,000   |
| upgrade access to picnic area:                       | \$ 2,000   |
| install security light:                              | \$ 2,000   |
| provide potable water:                               | \$ 2,000   |
| install fisheries structure to maintain pond depths: | \$ 3,000   |

**Dry Fork Trailhead and Campground:** continue to manage dispersed camping area and construct developed campground.

|                                     |            |
|-------------------------------------|------------|
| Construct campground and trailhead: | \$10,000 F |
| Provide security light:             | \$ 1,000 D |
| Provide potable water:              | \$ 3,500 D |
| Provide telephone:                  | \$ 1,000 D |
| Construct barrier free horse ramp:  | \$ 2,000   |

D = Design Completed

F = Designed and Funded

**Cedar Creek Trail System:** manage existing loops and mileage.

Reconstruct system to accommodate horses and mountain bikes:\$40,000  
Projects dependant on Land Acquisitions or easements:

Dissect southern loop into two shorter loops.

Trailhead w/campground in Boone county.

Look at options to connect to Katy Trail, Columbia and Fulton.

Work with county for improvements to trail in right-of-ways that are no longer used but not abandoned.

**Smith Creek:** manage for semi-primitive non motorized experience.

Change location of parking area: \$ 2,000

work to enforce closure order, and keep horses off trail as marked.

Pursue closure of county road through area until abandoned or until reconstructed.

**Windmiller Pond:** develop dispersed day use area for fishing/picnicking.

reconstruct road to parking area: \$ 5,000

use pipe gate for road closure: \$ 500 F

provide picnic table at parking area: \$ 700

**Cedar Creek:** work with MDC and counties to provide access for fishing and canoeing;

Develop access at Rutherford Bridge on NFS land;

**Interpretation:** complete draft plan for District Interpretation including timeline for implementation.

Draft a District brochure, stress "gateway to the MTNF", native landscape restorations, reclaimed from man's abuses and management to insure use for future generations. \$ 5,000

**Wildlife Related Recreation:** work with MDC to improve safety during firearms seasons: e.g. shotgun only.

complete boundary signing: \$10,000

continue to consolidate landholdings through acquisition of land.

evaluate parking area maintenance and development. Ongoing

Continue to improve fisheries management of existing ponds and provide for access to areas. Ongoing

**Volunteer and Partnership Programs:** continue accepting new agreements.  
work with "adopt-a-trail" and "adopt-a-site" programs;  
install campground hosts when sites are upgraded;  
continue projects with Cedar Creek Trails Coalition and Barrier-Free group  
under Challenge Cost Share agreements;

## FUNDING SOURCES

Recreation Capital Investment  
Engineering Capital Investment  
Challenge Cost Share Agreements  
Recreation National Forest System Funds  
Land and Water Conservation Fund  
Pine Ridge Donation Account  
Eastern National Forest Interpretive Association Grant